# Five-Year Review Report

**Third Five-Year Review Report**

**for**

## National Presto Industries Superfund Site

**Eau Claire**

**Chippewa County, Wisconsin**

**September, 2007**

**Prepared By:**

**Wisconsin Department of Natural Resources**
**West Central Region**
**Eau Claire, Wisconsin**

Approved by: Richard C Karl

Richard C. Karl
Division Director, Superfund
U.S. EPA Region 5

Date: 9-18-07

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## Five-Year Review Report

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## Attachments

## LIST OF ACRONYMS

| | |
|---|---|
| AOC | Administrative Order on Consent |
| ARAR | Applicable or Relevant and Appropriate Requirements |
| CERCLA | Comprehensive Environmental Response, Compensation, and Liability Act |
| DOA | Department of the Army |
| DCE | Dichloroethene |
| ECMWF | Eau Claire Municipal Well Field |
| EDS | East Disposal Site |
| ES | Wisc. Administrative Code Ch. NR140 Enforcement Standard |
| FS | Feasibility Study |
| IRM | Initial Remedial Measure |
| MRDS | Melby Road Disposal Site |
| NDC | National Defense Corporation |
| NPI | National Presto Industries, Inc. |
| O&M | Operation and Maintenance |
| OSWER | Office of Solid Waste and Emergency Response |
| QAPP | Quality Assurance Project Plan |
| QA/QC | Quality Assurance/Quality Control |
| PAL | Preventive Action Limit (State Groundwater Action Trigger) |
| PCE | Perchloroethylene or perchloroethene or tetrachloroethene |
| PM | Project Manager |
| RAO | Remedial Action Objectives |
| RI | Remedial Investigation |
| ROD | Record of Decision |
| RPM | Remedial Project Manager |
| SVE | Soil Vapor Extraction |
| TCE | Trichloroethylene |
| TCA | Trichloroethane |
| UAO | Unilateral Administrative Order |
| UU/UE | Unlimited Use or Unrestricted Exposure |
| U. S. EPA | United States Environmental Protection Agency |
| VOC | Volatile Organic Compound |
| WDNR | Wisconsin Department of Natural Resources |

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## Executive Summary

The selected remedies for the National Presto Industries (NPI) site included:

- the installation of an air stripper at the Eau Claire municipal well field (ECMWF) to remove volatile organic compounds (VOCs) prior to distribution to the city customers,
- establishment of the Town of Hallie Water Utility and provision of municipal water to the residents of the town,
- installation of groundwater recovery wells and cascade aerators to remove and treat contaminated groundwater and provide gradient control of groundwater in the two major NPI source areas,
- excavation and disposal of forge compound and contaminated soil in the NPI source areas,
- the design and construction of a soil vapor extraction system (SVE) and engineered cap to control contaminants at the Melby Road Disposal Site (MRDS) area of the NPI property, and
- establishment of a deed instrument to prevent damage to the Melby Road Disposal Site (MRDS) cap.

All of these remedies, with the exception of the deed instrument for the MRDS cap, have been implemented. In addition, an SVE system has been constructed and is being operated in an area where trichloroethylene (TCE) parts cleaner sludge was disposed. This area in the southwest corner of the property, west of Lagoon #1, was identified and investigated in 2002. Although the required deed restriction for the MRDS cap are not yet in place, other institutional controls to prevent exposure to contaminated groundwater or interference with the groundwater remedies have been developed and implemented. The Village of Lake Hallie has an ordinance in place that prohibits the installation of new private wells, and has a permit program for those residents who had wells prior to the creation of the water utility and seek to use such wells for non-potable purposes. The City of Eau Claire has an ordinance in place that prevents cross connections between private wells and the municipal water supply, and is in the process of developing an ordinance to restrict construction of new private water supply wells. Currently, the Eau Claire City/County Health Department requires a permit for the construction of any new well.

This five-year review found that the remedies were implemented in accordance with the requirements of the Records of Decision (RODs), with the exception that the deed instrument called for in the ROD for OU3 has not been recorded. All engineered remedies are functioning as designed. Immediate threats to human health and the environment have been addressed.

The remedial actions at OUs 1, 2 and 3 are protective in the short term. However, long term protectiveness for OUs 1, 2 and 3 will not be achieved until groundwater clean up standards are met and effective Institutional Controls (ICs) are implemented and complied with. Long-term protectiveness will be ensured by implementing and maintaining effective ICs as well as maintaining the site remedy components. Certain institutional controls developed by the Village of Lake Hallie and the City of Eau Claire are in place and operate to protect against exposure to contaminated groundwater and interference with the groundwater remedies. Implementation of appropriate restrictive covenants to prevent interference with the landfill cap is required,

Restrictive covenants to prevent interference with groundwater and other remedy components may also be required. Also, an IC Study needs to be completed by NPI for all three OUs and the ECMWF. NPI has agreed to conduct an IC Study to evaluate the effectiveness of current institutional controls and the need for additional controls on or before March 2008. Long-term stewardship must be ensured to verify compliance with ICs.

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# Five-Year Review Summary Form

## SITE IDENTIFICATION

**Site name** ***(from WasteLAN)*****:** National Presto Industries, Inc.

**EPA ID** ***(from WasteLAN)*****:** WID006196174

| **Region:** 5 | **State:** Wisc. | **City/County:** Eau Claire/Chippewa |
|---|---|---|

## SITE STATUS

**NPL status:** **X** Final ☐ Deleted ☐ Other (specify)

**Remediation status** (choose all that apply): ☐ Under Construction **X** Operating ☐ Complete

| **Multiple OUs?*** **X** YES ☐ NO | **Construction completion date:** 9 / 21 / 1999 |
|---|---|

**Has site been put into reuse?** ☐ YES ☐ NO The site continues in use as an industrial facility.

## REVIEW STATUS

**Lead agency:** **X** EPA ☐ State ☐ Tribe ☐ Other Federal Agency _____

**Author name:** Eileen Kramer

| **Author title:** Hydrogeologist | **Author affiliation:** Wisc. Dept. of Natural Resources |
|---|---|

**Review period:**** 01 / 03 / 2007 to 09 / 07 / 2007

**Date(s) of site inspection:** 01 / 23 / 2007 and 06/ 19, 20/2007

**Type of review:**

**X** Post-SARA ☐ Pre-SARA ☐ NPL-Removal only
☐ Non-NPL Remedial Action Site ☐ NPL State/Tribe-lead
☐ Regional Discretion

**Review number:** ☐ 1 (first) ☐ 2 (second) **X** 3 (third) ☐ Other (specify) _____

**Triggering action:**

☐ Actual RA Onsite Construction at OU #____
☐ Construction Completion
☐ Other (specify)
☐Actual RA Start at OU#____
**X** Previous Five-Year Review Report

**Triggering action date** ***(from WasteLAN)*****:** 09 / 27 / 2002

**Due date** ***(five years after triggering action date)*****:** 09 / 27 / 2007

* ["OU" refers to operable unit.]
** [Review period should correspond to the actual start and end dates of the Five-Year Review in WasteLAN.]

## Five-Year Review Summary Form, cont'd.

**Issues:**

VOC concentrations in MW-4B, MW-23A, MW-23B, and MW-68B are not decreasing possibly indicating an unidentified source area in the Southwest Corner of the NPI property.

Some of the ICs have not been implemented; implementing and maintaining ICs are required to assure that the remedy continues to function as intended for Site protectiveness. A review of the institutional controls is needed to assure that the remedy is functioning as intended with regard to the ICs and to ensure effective procedures are in-place for long-term stewardship at the Site.

Long-term stewardship must be assured which includes maintaining and monitoring effective ICs.

**Recommendations and Follow-up Actions:**

NPI should submit a workplan for investigating potential additional source causing VOCs to not decrease in several monitoring wells.

NPI to complete IC study and submit a workplan for implementing ICs.

U.S. EPA to prepare IC Plan to incorporate results of the IC Study and plan for additional activities as needed, for IC implementation and long-term stewardship.

**Protectiveness Statement(s):**

The remedial actions at OUs 1, 2 and 3 are protective in the short term. However, long term protectiveness for OUs 1, 2 and 3 will not be achieved until groundwater clean up standards are met and effective Institutional Controls (ICs) are implemented and complied with. Long-term protectiveness will be ensured by implementing and maintaining effective ICs as well as maintaining the site remedy components. Certain institutional controls developed by the Village of Lake Hallie and the City of Eau Claire are in place and operate to protect against exposure to contaminated groundwater and interference with the groundwater remedies. Implementation of appropriate restrictive covenants to prevent interference with the landfill cap is required. Restrictive covenants to prevent interference with the groundwater and other remedy components may be required. Also, an IC Study needs to be completed by NPI for all three OUs and the ECMWF. NPI has agreed to conduct an IC Study to evaluate the effectiveness of current institutional controls and the need for additional controls on or before March 2008. Long-term stewardship must be ensured to verify compliance with ICs.

**Other Comments:**

Date of last Regional review of Human Exposure Indicator (from WasteLAN): 09/28/2006
Human Exposure Survey Status (from WasteLAN): Current Human Exposure Under Control
Date of last Regional review of Groundwater Migration Indicator (from WasteLAN): 05/31/2007
Groundwater Migration Survey Status (from WasteLAN): Contaminated Ground Water Under Control
Ready for Reuse Determination Status (from WasteLAN): Undetermined

**Third Five-Year Review Report**

## I. Introduction

The Purpose of the Review

The purpose of a five-year review is to determine whether the remedy at a site is protective of human health and the environment. The methods, findings, and conclusions of reviews are documented in Five-Year Review reports. In addition, Five-Year Review reports identify issues found during the review, if any, and provide recommendations to address them.

Authority for Conducting the Five-Year Review

The Wisconsin Department of Natural Resources (WDNR), with the United States Environmental Protection Agency (U.S. EPA), is preparing this five-year review pursuant to CERCLA Section 121 and the National Contingency Plan (NCP). CERCLA Section 121 states:

> *If the President selects a remedial action that results in any hazardous substances, pollutants, or contaminants remaining at the site, the President shall review such remedial action no less often than each five years after the initiation of such remedial action to assure that human health and the environment are being protected by the remedial action being implemented. In addition, if upon such review it is the judgment of the President that action is appropriate at such site in accordance with section [104] or [106], the President shall take or require such action. The President shall report to the Congress a list of facilities for which such review is required, the results of all such reviews, and any actions taken as a result of such reviews.*

The agency interpreted this requirement further in the NCP; 40 CFR Section 300.430(f)(4)(ii) states:

> *If a remedial action is selected that results in hazardous substances, pollutants, or contaminants remaining at the site above levels that allow for unlimited use and unrestricted exposure, the lead agency shall review such action no less often than every five years after the initiation of the selected remedial action.*

The WDNR, with the U.S. EPA Region 5, conducted a five-year review of the remedial actions implemented at the NPI site in Eau Claire, Wisconsin. The review was conducted from January 2007 through September 2007. This report documents the results of the review.

Other Review Characteristics

This is the third five-year review for the NPI site. The triggering action for this review is the date of the second five-year review, as shown in EPA's WasteLAN database: September 27, 2002. This review is being conducted because hazardous substances remain on the site limiting use and restricting exposure.

The Eau Claire Municipal Well Field (ECMWF) is located two miles west of the NPI property and is a receptor of the groundwater contamination from the NPI property. The remedy at the ECMWF consists of an air stripping system to remove volatile organic compounds (VOCs) from water extracted by wells in the north portion of the well field. A separate five-year review of the remedy at the ECMWF was conducted this year by the U.S. EPA and completed on July 20, 2007.

The areas included in this five-year review report are the Melby Road Disposal Site located at the northern boundary of the NPI property; former treatment and disposal areas on the NPI property, such as the Eastern Disposal Site (EDS), Lagoon 1, Drainage Ditch 3, and other former disposal and treatment areas; the groundwater plumes; and the Lake Hallie Village (former Town of Hallie) public water supply.

## II. Site Chronology

### Table 1: Chronology of Site Events

| Event | Date |
|---|---|
| Discovery of contamination at Eau Claire Municipal Well Field (ECMWF) | March 1981 |
| ROD for Initial Remedial Measure (IRM) at ECMWF | June 10, 1985 |
| NPI listed on the National Priorities List (NPL) | June 10, 1986 |
| Administrative Order by Consent (AOC) for NPI to conduct a Remedial Investigation/Feasibility Study (RI/FS) | July 8, 1986 |
| NPI ROD initiated | 1987 |
| ROD selecting final remedy at ECMWF | March 31, 1988 |
| Phased Feasibility Study (FS) for Alternative Water Supply (OU2) | August 1989 |
| ROD for NPI selecting AWS for plumes north of NPI property (OU2) | August 1, 1990 |
| Unilateral Administrative Order (UAO) requiring implementation of 1990 ROD | March 1991 |
| ROD selecting interim action of groundwater pump & treat systems at NPI (OU1) | September 1991 |
| Phased FS for On-Site Groundwater Plume Containment | December 1991 |
| Hallie Sanitary District formed to operate AWS north of NPI | 1992 |
| Final Interim Remedial Design Package, On-Site Ground Water | July 1992 |
| UAO issued requiring implementation of 1991 ROD selecting groundwater pump & treat systems on the NPI property | July 2, 1992 |
| Consent Decree between U.S. EPA and NPI to operate & maintain the contamination treatment system at the ECMWF | 1993 |
| AOC for time-critical removal of wastes from Lagoon 1 and EDS at NPI | October 14, 1993 |
| NPI RI completed | September 12, 1994 |
| NPI Final FS | September 8, 1995 |
| Waste removal from Lagoon 1 and East Disposal Site (EDS) substantially complete | December 1995 |
| Final site-wide ROD which includes selection of cap and soil vapor extraction (SVE) system at MRDS (OU3) | May 15, 1996 |
| First Five-Year Review Report for NPI | September 29, 1997 |
| Final Design Submittal for Melby Road Disposal Site (MRDS) | February 1998 |
| MRDS Cap & SVE System Construction Documentation Report | June 1999 |
| PCOR | September 21, 1999 |
| Discovery of TCE parts cleaner sludge disposal area in southwest portion of NPI property | 2002 |
| Second Five-Year Review Report signed | September 27, 2002 |
| Start-up of remediation system to address TCE sludge disposal area | August 2003 |

## III. BACKGROUND

Physical Characteristics:

The NPI property is located at 3925 North Hastings Way in Eau Claire, Wisconsin. The property lies within the City of Eau Claire, with the exception of approximately 9 acres in the extreme eastern part of the property that are located in the Town of Hallie and approximately 4 acres in the extreme southern part of the property that are located in the Town of Seymour. Most of the NPI property, comprising approximately 320 acres, is situated in Chippewa County; a portion is located along the northern border of Eau Claire County. Figure 2 is a site plan for the NPI site. Lake Hallie Village (formerly the unincorporated Town of Hallie) is located north and east of the NPI property, while the City of Eau Claire is located south and west of the site.

The site is relatively flat and abuts a sandstone ridge at the south of the site. The areas to the east, north, and west are also relatively level, generally sloping gradually toward the Chippewa River, which is located approximately 2 miles north and west of the site. Lake Hallie, an impounded remnant of a former channel of the Chippewa River, lies approximately 1 mile north of the site.

Extending northward from the northwestern portion of the site to Lake Hallie and westerly from the site to the Chippewa River are buried pre-glacial valleys whose sand and gravel deposits serve as a primary drinking water aquifer in the Eau Claire area. Many private wells immediately north of the site were finished in the sand and gravel deposits within one of these buried valleys. Approximately 2 miles west of NPI, the ECMWF draws groundwater from more of these buried deposits. The direction of groundwater flow is controlled by the bedrock valleys beneath the sand and gravel, which carry groundwater to the northwest towards Lake Hallie and to the west towards the Chippewa River and the ECMWF.

A review of the WDNR Natural Heritage Inventory indicates historic observations of several species, such as loggerhead shrike and dwarf milkweed that are imperiled, threatened or endangered in Wisconsin, although they are considered secure on a global basis, at or within 1 mile of NPI. The federally protected bald eagle is observed within one mile of the NPI property. West of NPI, within a railroad corridor, an area of sand prairie of unique environmental interest is present although its quality is described as degraded by railroad and highway related activities. The contamination and remediation activities at NPI do not impact these species and this area of environmental concern.

Land and Resource Use:

Prior to its purchase by the U.S. Government (War Department) in 1942, the site was owned by nine individuals and was predominantly farmland with isolated areas of woodlands. In the early 1940s, the United States government acquired the property. From 1942 to 1945, the site was a government-owned, contractor-operated producer of ordnance chemicals and radar tubes. NPI purchased the property from the federal government in 1947. The company initially manufactured household appliances and outboard motors at the facility. Wastes generated consisted of metals, oils, grease, and spent solvents. Beginning in 1951, artillery shell fuses and aircraft parts were produced by NPI under military contracts. By 1954, NPI had dedicated the

site entirely to defense-related manufacturing, primarily the production of metal parts for 105-MM and 8-inch artillery shells, under contract with the Department of the Army (DOA). Early waste-handling practices included the use of dry wells and seepage lagoons. Wastes were also discharged to a former sand and gravel pit. The major waste stream was spent forge compound, which was composed of mineral oil, graphite, and asphalt.

Between 1959 and 1965, NPI engaged in little to no active production at the site. The site was again activated in 1966; multi-shift production continued until the mid-1970s. Except for a six-month research and development contract in late 1983 and early 1984, production of the 8-inch shells ceased in 1971. Production of the 105-MM projectiles ceased in 1980. From 1966 to 1969, spent forge compound was also landfilled on site. Between 1981 and 1992, National Defense Corporation (NDC), a wholly owned subsidiary of NPI, entered into annual standby contracts with the DOA to maintain the site in a high state of readiness. After the contracts ended in 1992, much of the equipment was disassembled and sold to other companies.

Notable current surface features at the NPI site include the main building, a capped landfill at the MRDS (part of OU3) and a number of smaller outbuildings.

Current land use for the surrounding area is single-family residential, and some commercial and industrial enterprises to the north and west. It is anticipated that these uses will continue into the foreseeable future.

Water supply in the area of the site is drawn from groundwater, although all local potable water is now supplied by the City of Eau Claire and Lake Hallie Village public water systems.

History of Contamination

Early waste-handling practices related to the manufacturing activities on the site included the use of dry wells and seepage lagoons. Manufacturing wastes were also discharged to a former sand and gravel pit. The major waste stream was waste forge compound, which was composed of mineral oil, graphite, and asphalt. NPI discharged waste water containing significant amounts of waste forge compound to Lagoon #1. From 1966 to 1969, waste forge compound was landfilled on site in an area referred to as the Melby Road Disposal Site (MRDS).

In March 1981, routine groundwater sampling by the State of Wisconsin detected Volatile Organic Compounds (VOCs) in the City of Eau Claire's municipal water supply. Figure 2 is a site plan showing the ECMWF and NPI sites and the various areas of the latter. Contaminants of concern included VOCs such as trichloroethylene (TCE), dichloroethene (DCE), dichloroethane (DCA), and tetrachloroethene (PCE). In addition to monitoring the municipal production wells, the City began testing private residential wells located immediately northeast of the municipal well field. VOCs were detected in several of the residential wells at concentrations above drinking water standards.

The contaminants observed in the source areas on the NPI property appear to have migrated vertically through the unconsolidated soils to the groundwater and have then traveled within the

aquifer following the buried valleys. There is a direct relationship between the contaminants at the NPI site and those found at the ECMWF.

Initial Response

Pursuant to CERCLA, the U.S. EPA placed the ECMWF site on the National Priorities List in September 1984. Also in 1984, the U.S. EPA conducted a focused Remedial Investigation (RI) to determine the extent and source of the groundwater contamination. Based on groundwater monitoring data from private wells and from monitoring wells installed as part of the ECMWF RI, two distinct plumes, separated by 1,700 feet, were detected. Although the U.S. EPA investigated several potential sources during the RI, the Agency was unable to confirm the source of the plumes. The NPI site was not initially investigated as a potential source for the groundwater contamination in the RI conducted for the ECMWF, but was identified in the RI as a site requiring additional study.

On June 10, 1985, the U.S. EPA issued a ROD which selected a packed column air stripper as an Initial Remedial Measure (IRM) to address the groundwater contamination at the ECMWF. The Corps of Engineers began construction of the air stripper in 1986 and completed construction in June 1987. The system became operational in August 1987. Treated groundwater from the air stripper is discharged into the municipal water treatment plant where it is combined with water from uncontaminated wells. This combined stream is then chlorinated and fluoridated and passed on to municipal users. The five year review for the remedy at the ECMWF has been conducted separately, and a separate report has been written.

In accordance with an Administrative Order by Consent (AOC), effective July 8, 1986, NPI began an investigation that included delineation of groundwater plumes from the NPI property to Lake Hallie, approximately one mile north of NPI. Plume 3 was determined to originate at the MRDS and to migrate in the sand and gravel deposits in a buried bedrock channel to Lake Hallie. Plume 4 was initially not traced back to the NPI property, but based on additional groundwater monitoring was determined to be associated with Plume 3 and the MRDS. Plume 5 originates at the EDS and also discharges to Lake Hallie.

Based on analytical data from monitoring wells and private water supply wells in the Town of Hallie, U.S. EPA issued a Section 106 Unilateral Administrative Order (UAO), effective April 25, 1989, pursuant to which NPI implemented a temporary bottled water distribution program for all private well users in the unincorporated area (Town of Hallie) affected by Plumes 3, 4, and 5.

On August 1, 1990, U.S. EPA issued a ROD (OU2) for the NPI site that selected a permanent alternative drinking water supply for the area affected by groundwater plumes 3, 4, and 5. U.S. EPA issued a Section 106 Unilateral Administrative Order in March 1991 to NPI and its wholly owned subsidiary, the National Defense Corporation (NDC), requiring implementation of the activities identified in the 1990 NPI ROD. This work included construction of a water supply system and an extension of the municipal water service to areas annexed by the City of Eau Claire. In the fall of 1991, a permanent alternate drinking water supply was installed by NPI to serve a population of about 425 persons in 174 residences in the Town of Hallie.

In addition to the creation of the Hallie Sanitary District, local regulation and ordinances now restrict the use of private wells in both the City of Eau Claire and the Town of Hallie. The Town of Hallie prohibits the potable use of private water in areas connected to the municipal supplies, and private wells must be disconnected from indoor plumbing. The City of Eau Claire, while not prohibiting private wells, does require that there be no cross connections between private wells and the municipal water supply. Generally speaking, the depth to groundwater in the area of the plumes (60 to 70 feet) and the presence of municipal water make it unlikely that private wells will be drilled.

Basis for Taking Action:

In 1981, during routine water supply sampling, the ECMWF was found to have VOC contamination in some of the production wells in the north part of the well field. During the RI at the NPI site it was determined that NPI was the source of the contamination at the ECMWF. The NPI site was proposed as an NPL site on October 15, 1984, and formally listed on June 10, 1986. Also in 1986, NPI entered into an agreement with the U.S. EPA and the WDNR to conduct the Remedial Investigation/Feasibility Study (RI/FS) at the NPI site. An Administrative Order by Consent became effective on July 8, 1986. The purpose of the RI was to identify sources of contamination and to characterize the contamination at the site. The RI began in 1987 and was finalized on September 12, 1994. Work conducted during the RI included sampling and analysis of groundwater, soils, soil vapor and waste materials, and geologic and hydrogeologic studies.

Waste forge compound, soil/forge compound mix, other wastes, and soil containing contaminants of concern were found at the following source areas on the NPI property: Lagoon No. 1, the MRDS, the East Disposal Site (EDS), Drainage Ditch 3, and Dry Wells 2 and 5. The RI identified VOCs, including TCA, TCE, tetrachloroethene (PCE) and their degradation products, 1,1-dichlorethane (1,1-DCA), 1,1-dichloroethylene (1,1-DCE), and 1,2-dichloroethylene (1,2-DCE). Semi-volatile Organic Compounds (SVOCs) were observed in waste forge compound in Lagoon No. 1, but not in any groundwater samples. Inorganic compounds were identified in waste, soil and water.

Five individual plumes of groundwater contamination were identified. Figure 3 shows the locations of the plumes and their approximate maximum sizes as observed during the RI. During the remedial investigation of the NPI site, the U.S. EPA conclusively determined that wastes located at the NPI site were the source of the groundwater contamination at the ECMWF.

The Final RI includes a Baseline Risk Assessment, which was conducted to characterize the current and potential threat to public health and the environment at the site. Exposure scenarios that were evaluated are Current Off-Site Residents, Future On-Site Residents, Current Off-Site Recreational, and Current On-Site Workers. The total excess cancer risk for off-site residents ranged from 8.4E-07 to 3.7E-06. For potential future on-site residents the non-carcinogenic hazard indices ranged from 1.2 to 6.6. The majority of this risk was associated with exposure to the groundwater. The cancer risk ranged from 6.0E-05 to 3.8E-04. The Baseline Risk Assessment states that future residential exposure is unlikely and the methods used were

conservative. For on-site workers the baseline assessment indicates a total excess cancer risk ranging from 4.4E-06 to 5.4E-05.

Based on qualitative analyses, the ecological risks associated with exposure of the terrestrial, aquatic and avian species to contaminants at the NPI property are within a range acceptable under U.S. EPA guidance and regulations.

The primary risks at the NPI property relate to the potential for the continued contamination of groundwater. In order to provide for the long-term protection and cleanup of the groundwater, the 1996 ROD found that source areas at the NPI property must be contained or eliminated in order to facilitate the long-term cleanup of the aquifer.

*Contaminants of Concern*

Although a number of chemical compounds have been detected in soil and groundwater at the NPI site, the main contaminants of concern are DCA, DCE, PCE, 1,1,1-trichloroethane (TCA) TCE, and to a lesser extent cadmium. Of these, TCE is currently the primary contaminant of concern.

## IV. REMEDIAL ACTIONS

Remedy Selection

*OU1— Interim Action, Plume Containment at MRDS & SW Corner*

In September 1991, U.S. EPA issued a ROD for OU1, contaminated groundwater on the NPI property, for the selected interim action of groundwater pump and treat. The objectives of this interim action were plume containment from the Southwest Corner/Lagoon 1 area and the MRDS, and prevention of further degradation of the groundwater. The selected remedy included installation of groundwater extraction wells (two each in the Southwest Corner and the MRDS) and treatment of the extracted water by two independent cascade aeration units, with discharge of the treated groundwater via the City of Eau Claire storm sewer system to the Chippewa River. The WDNR concurred with this selected remedy. On July 2, 1992, the U.S. EPA issued NPI and NDC another Section 106 Unilateral Administrative Order, which required these companies to construct or fund the construction of the on-site groundwater treatment cascade system selected in the September 1991 interim action ROD. The selected remedial action also called for long-term groundwater monitoring to measure progress and performance of the groundwater extraction system; to verify contaminant plume capture; to determine the need, if any, for additional treatment of extracted groundwater; and to monitor compliance with the WPDES permit requirements.

*OU2 – Public Water Supply & Annexation/Hook-up to Eau Claire Municipal Water Supply*

The August 1, 1990 ROD for OU2, an alternative water supply for Town of Hallie and City of Eau Claire private wells that were impacted or potentially impacted by contaminated groundwater, selected construction of a community water supply for the impacted area in the

Town of Hallie and extension of the City of Eau Claire municipal water supply to properties that annexed to the City.

*Source Control Measures Selected Prior to Issuance of OU3 ROD*

On October 14, 1993, U.S. EPA, NPI, and NDC entered into an Administrative Order by Consent for the performance of time-critical, on-site removal activities. This Order, subsequently modified on November 4, 1994, provides for (1) time-critical excavation of the waste forge compound from Lagoon No. 1 and the EDS, and (2) use of wastes as a supplemental fuel at a cement kiln approved under the Comprehensive Environmental Response, Compensation and Liability Act of 1980, 42 U.S.C. Section 9601 et seq., as amended by the Superfund Amendments and Reauthorization Act of 1986, Pub. Law No. 99-499, 100 Stat. 1613 (1986) (CERCLA). Non-time-critical components of the removal action included characterization, evaluation, design, and remediation of soils and soil gas, if any, remaining in Lagoon No. 1 after the excavation is complete. The estimated cost of the work to be completed pursuant to the removal action was $4.4 million. Removal of the wastes began in 1993, and almost all of the waste forge compound materials had been excavated from Lagoon No. 1 and the EDS by the end of 1995.

*OU3 – Waste Removal from Source Areas, SVE & Cap at MRDS, and Long-term Groundwater Monitoring*

The final site-wide remedy was identified in the May 15, 1996 ROD (OU3). In addition to those response actions previously completed and currently underway at the NPI site, the U.S. EPA determined that the following additional measures should be implemented in order to fully address all threats to human health and the environment posed by contamination at the site:

- MRDS and EDS: Installation of an SVE system at the MRDS. Removal of identified concentrated wastes, if any, identified by the SVE at the MRDS. Excavation and consolidation of EDS wastes with MRDS wastes and installation of a multi-layer cap compliant with Wisconsin Administrative Code Chapter NR 660 over the combined wastes at the MRDS. The ROD also stated that the U.S. EPA would seek deed restrictions limiting land use in the future development of the capped area.

- Drainage Ditch #3: Removal of soils contaminated with waste forge compound and their consolidation with wastes at the MRDS.

- Dry Wells #2 and #5: Removal of contaminated soils and disposal of them in an off-site landfill.

- Plume 1/2: Continued operation of the two-column air stripper at the leading edge of the groundwater contaminant plume (the ECMWF), continued operation of the on-site Southwest Corner pump-and-treat system to prevent the off-site migration of contaminated groundwater, and long-term groundwater monitoring of Plume 1/2.

- Plume 3/4: Continued operation of the MRDS groundwater pump-and-treat system to prevent the off-site migration of contaminated groundwater, long-term groundwater monitoring of Plume 3/4, and surface water sampling in Lake Hallie.

- Plume 5: Long-term groundwater monitoring of Plume 5 and surface water sampling in Lake Hallie.

The final ROD for the NPI site further addressed contamination in the groundwater plumes (1/2) traveling from the NPI site to the ECMWF and serves as the U.S. EPA's final remedy with regard to those plumes. It also provided for long-term operation, maintenance, and repair of the ECMWF air stripper and the installation and operation of on-site groundwater extraction wells at the MRDS and Southwest Corner downgradient of Lagoon #1 and Drainage Ditch #3.

Remedy Implementation

The engineered/technical remedies have been implemented. All remedial activities are either ongoing or completed. Long-term treatment of groundwater and systematic monitoring continue both on and off the NPI property.

*OU1—Interim Action, Plume Containment at MRDS & SW Corner*

The design of the OU1 remedy, intended to prevent movement of contaminated groundwater from the MRDS and southwest portion of the NPI property, was prepared by NPI and approved by U.S. EPA with modifications in June 1992. Issues related to the discharge of treated groundwater to the Chippewa River through the City of Eau Claire storm sewers were resolved, and WDNR issued a Chapter 30 permit to extend the sewer outfall into the main channel of the River. WDNR issued concentration limits for the discharge, and construction of the interim action for groundwater began in late 1993 and was completed in March 1994. Pumping of the groundwater extraction wells began in March 1994. The two wells at the MRDS pumped at rates of 100 gallons per minute (gpm) and 80 gpm. At the southwest portion of the NPI property the wells pumped 70 gpm and 130 gpm. The groundwater extraction wells at the Southwest Corner and the MRDS and the two corresponding cascade aerators have run continuously, except for a short period of down time during the above 1998 remedial activities. Effluent monitoring shows that the treated groundwater discharge limits are being met.

*OU2 – Public Water Supply & Annexation/Hook-up to Eau Claire Municipal Water Supply*

Design of the OU2 remedy was begun in September 1990 and approved by the U.S. EPA on February 27, 1991. Extension of the City water supply was initiated in July 1991. The City of Eau Claire's portion of the alternative water system became operational in November 1991. Construction of the Hallie Sanitary District system began in April 1991, and in 1992, the Hallie Sanitary District was formed to operate the new water supply system.

*OU3 – Waste Removal from Source Areas, SVE & Cap at MRDS, and Long-term Groundwater Monitoring*

Both pumpable (about 1.1 million gallons) and non-pumpable (about 5,000 cubic yards) waste forge compounds from Lagoon #1 were removed between late 1993 and late 1995 and sent to a CERCLA-approved cement kiln for use as secondary fuel. Approximately 9,800 cubic yards of soil and forge compound were incorporated under the cap at the MRDS. An SVE system was subsequently installed in Lagoon #1 prior to backfilling, and operated from September 1997 to August 1998. In September 1998, the U.S. EPA approved the abandonment of the SVE wells and the backfilling of Lagoon #1. Waste forge compound and contaminated soils at the EDS and in Drainage Ditch #3 have been excavated and incorporated, along with the Lagoon #1 waste described above, under the cap at the MRDS. Contaminated soils from Dry Wells #2 and #5 have been excavated and disposed of at a licensed sanitary landfill. The Lagoon #1 activities were completed by June 1998. All these activities, with the exception of the Lagoon #1 excavation and SVE activities, occurred during the summer of 1998. In addition, an SVE system was installed beneath the cap at the MRDS to remove contaminated soil gas. Routine sampling of the SVE exhaust gas is done to monitor the performance of the system.

In addition, several removal actions of material contaminated with waste forge compound were conducted that were not specifically required by the 1996 ROD. Excavated areas include the east extension of former Lagoon #1, about 7,000 square feet from an area west of former Lagoon #1 in the southwest property corner, a swale between former Lagoon #3 and #4 in 1998, the southwest corner of former Lagoon #2 in 2000, and in 2001 the loading dock area at the south end of NPI's main building.

All the material from the southwest property corner and most of the material from the east extension of former Lagoon #1 were consolidated at the MRDS in 1998. Approximately 350 cubic yards ($yd^3$) of material from the east extension of Lagoon #1, 60 $yd^3$ of stockpiled material from the MRDS, 60 $yd^3$ from the former Lagoon #3/#4 swale area, 3,000 $yd^3$ from the southwest corner of former Lagoon #2, and 1,900 $yd^3$ from the loading dock area were disposed of off site at licensed sanitary landfills. A "No Further Remedial Action" submittal for the southwest corner of former Lagoon #2 has been submitted and final documentation of the loading dock area is to be submitted by NPI.

The MRDS cap was constructed as designed in accordance with Wisc. Adm. Code Ch. NR660 in 1998. The amount of waste that was consolidated at the MRDS was more than anticipated and the extent of the capped area was expanded to the east by approximately 20 percent. The finished capped area is 9.92 acres.

The WDNR has reviewed the no further action requests submitted by NPI for soil at the EDS, Drainage Ditch #3, Dry Wells #2 and #5, and Lagoon #2. NPI has been advised by the WDNR that should the U.S. EPA determine that "no further action" is required at these areas, the State will concur.

Monitoring of specified groundwater monitoring wells and private wells has continued at regularly scheduled intervals. Annual reports are prepared and submitted to the U.S. EPA and

WDNR documenting this activity, summarizing the results, and providing recommendations, as appropriate, for modifications to the groundwater monitoring program.

Numerous rounds of surface water samples have been collected from Lake Hallie and analyzed for VOCs since 1996. The most recent rounds of samples were two that were collected in 1999. The only compounds detected at concentrations above the limit of quantitation in these samples were toluene and xylenes. Both were present at very low concentrations in only a few samples. The intermittent presence of these compounds at low concentrations is likely due to storm water discharges into and/or motorboat activity on the lake.

Institutional Controls

Institutional Controls (ICs) are required to ensure the protectiveness of the remedy. ICs are non-engineered instruments, such as administrative and/or legal controls, that help minimize the potential for exposure to contamination and protect the integrity of the remedy. Compliance with ICs is required to assure long-term protectiveness for any areas which do not allow for unlimited use or unrestricted exposure (UU/UE).

The RODs for OU1 and OU2 do not explicitly call for administrative or institutional controls. The OU3 ROD states that U.S. EPA will pursue a deed restriction on the MRDS cap area to prevent activities damaging to the cap.

The NPI 1996 ROD states institutional controls are in effect to prevent area residences and businesses in Plumes 1-2, 3, 4 and 5 from using wells in the area for drinking water. A Village of Lake Hallie ordinance prohibits the installation of new private wells. Residents who had private wells prior to the creation of the water utility may apply annually for a permit to use those wells for other purposes, such as irrigation and car washing, as long as there is no connection to indoor plumbing. The City of Eau Claire has an ordinance in place that prevents cross connections between private wells and the municipal water supply, and is in the process of developing an ordinance to restrict construction of new private water supply wells. Currently, the Eau Claire City/County Health Department requires a permit for the construction of any new well.

Additionally, several other areas of contamination on-site have been remediated where some waste was left in place and would not allow for UU/UE and for which ICs are needed. Some of these areas were reviewed by the WDNR remediation program case closure committee and the determination made that if the U.S. EPA required no further action in those specific areas the State would concur. These determinations specifically required ICs. Others were areas subject to removal actions on-site. Those areas included the Eastern Disposal Site, drainage ditch, Lagoons 1-3, loading dock/parking lot area, southwest property corner and dry wells. Other remedy components may require ICs. At this time, initial IC evaluation activities have determined that the only necessary ICs that have been implemented to date in the non-UU/UE areas are those that restrict groundwater use in the downgradient areas.

Institutional controls known at this time to be required, implemented or recommended are listed in the table below:

## Table 2: Institutional Controls Summary Table

| Media, Engineered Controls & Areas that Do Not Support UU/UE based on Current Conditions | Institutional Control Objective | Title of IC Instrument Implemented, Planned or Recommended |
|---|---|---|
| MRDS | To prevent activity that would compromise integrity of the cap | Deed restriction required by ROD. To be implemented. |
| Other areas potentially requiring ICs on the NPI property will be determined, such as locations where waste was left in place or remedy components are housed. | To prevent activity that would compromise integrity of the remedy.<br>Prevent residential use of the property. | Under Review |
| NPI Company Property-<br>Other areas of the property | To prevent activity that would compromise integrity of the remedy.<br>Prevent residential use of the property. | Under Review |
| Non-NPI Company Property-<br>Remedy Components | To prevent activity that would compromise integrity of the remedy. | Under Review |
| Groundwater on NPI Property | To prevent human consumption of contaminated groundwater until groundwater cleanup goals are achieved | Village of Lake Hallie ordinances restricting private wells and cross connections are in place.<br>Placement of future public supply wells by the Village subject to Wisc. Adm. Code Ch. NR811 that prohibits wells in proximity to contaminated groundwater.<br>City of Eau Claire ordinance on cross connections is in place.<br>City ordinance on private wells in development.<br><br>Under Review |
| Groundwater -- Plumes 1-2 current area that exceeds groundwater standards | To prevent human consumption of contaminated groundwater until groundwater cleanup goals are achieved | Placement of future public supply wells by the City is subject to Wisc. Adm. Code Ch. NR811 that prohibits wells in proximity to contaminated groundwater.<br>City of Eau Claire ordinance on cross connections is in place.<br>City ordinance on private wells in development.<br><br>Under Review |

| Media, Engineered Controls & Areas that Do Not Support UU/UE based on Current Conditions | Institutional Control Objective | Title of IC Instrument Implemented, Planned or Recommended |
|---|---|---|
| Groundwater -- Plumes 3, 4 and 5 current area that exceeds groundwater standards | To prevent human consumption of contaminated groundwater until groundwater cleanup goals are achieved | Village of Lake Hallie ordinances restricting private wells and cross connections are in place. Placement of future public supply wells by the Village subject to Wisc. Adm. Code Ch. NR811 that prohibits wells in proximity to contaminated groundwater. City of Eau Claire ordinance on cross connections is in place. City ordinance on private wells in development.<br><br>Under Review |

As mentioned below, maps which depict the current conditions of the site and areas which do not allow for UU/UE will be developed as part of the IC evaluation activities.

An IC study has been requested from NPI and IC evaluation activities are in progress. In a letter dated December 13, 2006, U.S. EPA required NPI to complete and submit an institutional control study. NPI and their consultant have agreed to perform the study and submit a report. Maps which depict the current conditions of the site and areas which do not allow for UU/UE will be developed as part of the IC evaluation activities along with property title work and a study of the local governmental ordinances. Long-term stewardship procedures to ensure effective ICs are maintained and monitored shall be reviewed. A plan shall be developed (or O&M plan updated) to include procedures to ensure long-term IC stewardship such as regular inspection of ICs at the site and annual certification to U.S. EPA that ICs are in place and effective. Also, development of a communications plan shall be explored.

Once the IC evaluation activities have been completed, an IC plan will be developed by U.S. EPA to incorporate the results of the evaluation and plan for additional IC activities as needed.

Current Compliance: Based on inspections and interviews the WDNR is not aware of any drinking water supply wells installed within the impacted groundwater area, with the exception of the ECMWF which has a treatment system. Restrictions on site access and groundwater restriction ordinances appear to be functioning as intended.

System Operations/Operation and Maintenance (O&M)

*OU1 – Interim Action, Plume Containment at MRDS & SW Corner*

The groundwater extraction wells at the MRDS and in the Southwest Corner are performing consistently. Monthly reports are submitted by NPI's contractor, Gannett Fleming, on behalf of NPI summarizing the amount of water pumped and treated from each extraction well and from the site as a whole. Since 2002, the pump rates from wells EW-1R, EW-2 and EW-4 have

decreased slightly. May 2002 and May 2007 pump rates are typical of other months in the same respective years, and compare as follows:

| Well | May 2002 | May 2007 |
|---|---|---|
| EW-1R | 104 gallons/minute (gpm) | 85 gpm |
| EW-2 | 97 gpm | 78 gpm |
| EW-4 | 133 gpm | 89 gpm |

EW-3 was replaced by EW-5 in 2004. Pump rates for EW-5 are three to four times greater than pump rates for EW-3, so overall pumpage from the site has increased. Based on results of groundwater sampling in monitoring wells down-gradient of these extraction wells, they remain effective in containment of the contaminant plumes. Extraction well shut-downs have been minimal. The cascade aerators at the MRDS and in the Southwest Corner have operated well, effectively removing contaminants with no interruption. The sewer lines to the Chippewa River for discharge of treated, extracted groundwater have also performed well with occasional clean-outs by NPI personnel.

*OU2 – Hallie Public Water Supply & Annexation/Hook-up to Eau Claire Municipal Water Supply*

All areas that were impacted by the groundwater plumes from NPI have either been annexed to the City of Eau Claire and are served by the Eau Claire Municipal Water System, or are served by the Village of Lake Hallie Water System (formerly the Hallie Sanitary District), which was formed in accordance with the ROD for OU2.

The remedy that addresses contaminated groundwater that migrated to the ECMWF is addressed by a separate Five-Year Review that was prepared by the U.S. EPA on July 20, 2007.

The Village of Lake Hallie Water System continues to serve the 425 residents originally included in the ROD requirement for an alternate water system (AWS), and has expanded to now serve a population of about 5,670 throughout the recently incorporated Village. The expansion has come about because of changing demographics such as increased population density, and the desire to incorporate as a Village as opposed to annexing to a nearby City such as Eau Claire or Chippewa Falls. The Village has ordinances that control the construction or maintenance of private wells for non-potable purposes and prohibit plumbing cross connections between private water supplies and the Village Water System. The operator of the Village Water Supply estimates that maintenance costs are approximately $90,000 per year.

*OU3 – Waste Removal from Source Areas, SVE & Cap at MRDS, and Long-term Groundwater Monitoring*

An O&M plan was prepared for the MRDS cap and SVE system. The plan discusses the operation and monitoring requirements for both the cap and the SVE system and the QA/QC procedures. The plan describes how routine maintenance is to be conducted following manufacturers' recommended schedules and the sampling and analytical requirements.

The SVE system at the MRDS continues to operate continuously, using one blower at a rate of 570 standard cubic feet per minute (scfm). Nine vent wells continue in operation. The blower is shut down once per month for 30 minutes to drain condensate from the system. On July 23, 2005, the blower was down for one hour due to an electrical outage. SVE system emissions are tested monthly. Overall, the VOC emission concentrations were less than 0.5 micrograms/liter (ug/L).

No problems with the multi-layer cap on the MRDS have been reported. During the site inspection on June 20, 2007, the cap was inspected by U.S. EPA and WDNR with a representative of NPI's consultant, Gannett Fleming. The cap is well vegetated with grass and had recently been mown. The drainage ditches surrounding the capped area were free of debris or other impediments to good drainage. There were no signs of subsidence or slumping of the cap. There were several small (three-four inch diameter) animal burrows observed, which appeared to be the result of a small animal such as a ground squirrel. They did not appear likely to affect the integrity of the cap. One area of rill-type erosion was noted on the north side of the cap. This was noted also by the Gannett Fleming representative who indicated that repair would be carried out. On the north side, a small area at the margin of the cap that had been repaired with cobbles, to facilitate flow of water away from the foot of the cap, was observed.

A groundwater sampling program and QA/QC Plan were also developed for this site and have evolved over time as contaminant concentrations declined and new sampling equipment and techniques became available and approved by the agencies. The current monitoring program consists of quarterly sampling and analysis of extraction wells EW-1R, EW-2, EW-4, and EW-5; the effluent from cascade aerators CAS-1 and CAS-2; manhole MH-18; and approximately 17 monitoring wells. Thirty-four monitoring wells are sampled semi-annually, and 70 wells are sampled annually. See Figures 4, 6 and 7 for the well locations. These wells include eight monitoring wells (EC-1 to EC-8) in the immediate vicinity of the city well field. Sampling frequencies from groundwater monitoring wells ranges from quarterly to annual, depending on the historic concentrations of contaminants in a given well. The analytes for all of the wells, CAS-1, and CAS-2 are either a select list of five VOCs (DCA, DCE, PCE, TCA and TCE) and/or cadmium. The quarterly analytes for MH-18 include the five select VOCs, cadmium, pH, temperature, and hardness as calcium carbonate. The annual analytes for MH-18 include arsenic, aluminum, trivalent and hexavalent chromium, copper, lead, nickel, selenium, silver, zinc, pentachlorophenol, di-n-butyl phthalate, bis (2-ethylhexyl) phthalate, and the PAHs.

Groundwater elevations are measured during each sampling event to provide the data needed to prepare groundwater contour maps.

Samples of the treated groundwater effluent have also been collected and tested for chronic and acute toxicity using the whole effluent toxicity (WET) test. Sampling and testing were quarterly for one year, annual for five years, and bi-annual the last two years. The effluent has passed for all organisms in all sampling rounds and the WET test is no long required by WDNR.

Table 3 provides the approximate annual O&M costs for each of the various components of the remediation activities at the NPI and ECMWF sites from 2002 through the middle of 2007.

**Table 3: Annual Operations & Maintenance Costs**

| Year | OU1 &GW Monitoring | OU3 MRDS SVE | ECMWF | Annual Total |
|---|---|---|---|---|
| 2002 | $ 137,600 | $ 18,700 | $ 55,000 | $ 211,300 |
| 2003 | $ 179,800 | $ 16,400 | $ 50,300 | $ 246,500 |
| 2004 | $ 167,300 | $ 15,000 | $ 50,200 | $ 232,500 |
| 2005 | $ 110,000 | $ 16,800 | $ 48,500 | $ 175,300 |
| 2006 | $ 83,000 | $ 19,500 | $ 55,300 | $ 157,800 |
| 2007 | $ 98,400 | $ 13,800 | $ 20,500 | $ 132,700 |

NOTES:
Costs do not include mowing of the cap and NPI employee payroll costs for time spent sampling etc.
OU1 includes all activities other than the MRDS SVE and ECMWF.
OU3 is the MRDS SVE.
OU2, the alternate water supply is not included in this table.
2007 costs are for first six months.

## V. PROGRESS SINCE LAST REVIEW

This is the third Five-Year Review for this site. The second Five-Year Review in 2002 found that the selected remedies had been implemented and were protective of human health and the environment. The following table summarizes the issues and recommendations of the 2002 report and the response or follow-up that occurred.

**Table 4: Actions Taken Since the Last Five-Year Review**

| Issues from 2002 Review | Recommen-dations | Party Respo nsible | Mile-stone Date | Action Taken & Outcome | Date of Action |
|---|---|---|---|---|---|
| Increasing VOC concentra-tions in SW Corner | Investigate and recommend action | NPI | 3/31/03 | Investigation of area. New source area discovered. | 12/2002 |
| | | | | SVE system constructed and operated in SW Corner | 6/2004 Currently operated. |
| | | | | EW-3 replaced by EW-5. | 2004 |
| | | | | VOC concentrations in monitoring wells have stabilized or decreased. 70 pounds of TCE removed from vadose zone by SVE. | On-going |
| No objective criteria for evaluating groundwater data. | Modify groundwater monitoring program | NPI | 6/30/03 | NPI submitted draft criteria. | 6/21/2002 |
| | | | | Agencies commented & NPI submitted revised criteria/plan. | 5/6/2003 |
| | | | | Revised plan implemented on interim basis | July 2003 |

| Issues from 2002 Review | Recommen-dations | Party Respo nsible | Mile-stone Date | Action Taken & Outcome | Date of Action |
|---|---|---|---|---|---|
| Monitoring wells needing maintenance | Label & repair wells | NPI | 12/31/02 | Most wells repaired, labeled, locked as needed. Some wells are vulnerable to damage because of location. | 2002-07 |
| MRDS Cap repairs | Perform repairs | NPI | 6/30/02 | Repairs performed. | On-going |
| Documenta-tion of Loading Dock & Lagoon 2 removals | Complete documentation | NPI | 6/30/03 | Reporting complete for Lagoon 2. | 9/27/05 |
| Deed Restriction Require-ments to be Determined | Identify areas needing restriction, secure restrictions, and report. | NPI | 9/29/07 | U.S. EPA issued a letter requiring NPI to complete an institutional control study. NPI has committed to completing the study. | 12/13/06 |

Other progress since that last five-year review include, groundwater data from Plume 3/4, as well as VOC analyses of water from the MRDS extraction wells and air emissions from the MRDS SVE system indicate that groundwater under the MRDS may not be contaminated above site clean-up standards. NPI and its consultant, Gannett Fleming, have submitted a proposal to conduct an 18 month pilot study involving the shut down of extraction wells EW-1R and EW-2. The proposal includes provisions for increased groundwater monitoring down-gradient of the MRDS and a plan for re-starting the extraction wells in case of negative impact. The agencies and NPI and its consultant, Gannett Fleming, are in the process of coming to agreement on specific pilot test procedures and criteria for evaluation of results.

In response to increasing concentrations of TCE in monitoring wells MW-34 and MW-70, in 2002, NPI and their consultant, Gannett Fleming, conducted an investigation, sampling soils, soil vapors and groundwater in the Southwest Corner Area. An area where TCE parts cleaner sludge had been disposed was identified. In 2003, an SVE system was constructed and commenced operation in July. Since that time TCE concentrations have been observed to decrease significantly in MW-34 and MW-70.

NPI and its consultant, Gannett Fleming, have submitted a proposed revision to the groundwater monitoring program. The agencies and NPI and Gannett Fleming are in the process of coming to agreement on specifics of the sampling modifications. It is possible that sampling can be streamlined significantly by use of newer sample collection methods, and that future sample frequencies and locations can be more systematically determined without compromising data quality and meaningfulness.

In January 2007, the agencies and NPI and NPI's consultant, Gannett Fleming, met and discussed a number of issues. Gannett Fleming presented a list of monitoring wells that they propose should be abandoned because they are not near the groundwater plumes and are not useful for the on-going monitoring. U.S. EPA and WDNR will evaluate the proposal and respond.

## VI. FIVE-YEAR REVIEW PROCESS

Administrative Components:

Representatives of NPI, the WDNR, and City of Eau Claire were notified of the initiation of the Five-Year Review in a letter from U.S. EPA dated December 13, 2006. The review team included Howard Caine of the U.S. EPA and Eileen Kramer of the WDNR. NPI personnel, including Derrick Paul, Cash Manager and Marcus Kobliska, Maintenance Supervisor; and staff of NPI's consultant, Gannett Fleming, including David Olig, Dennis Kugel, Chris Barden, and Darrell Dahlman, provided assistance.

From January to September 2007, the review team reviewed historical data and documents, visited and inspected the site, and prepared the report. Howard Caine of the U.S. EPA and Eileen Kramer of the WDNR completed the site inspection on January 23 and 24, and June 19, 20 and 21, 2006, with the assistance of NPI and NPI's consultant, Gannett Fleming.

Community Notification:

The community was notified of the beginning of the Five-Year Review via display advertisements in the Chippewa Herald on January 31, 2007, the Chippewa County Advertiser on February 7, 2007, and the Eau Claire Leader-Telegram on January 30, 2007.

Meetings were held with representatives from the following groups to review information and solicit comments as part of the review process:

- Jeff Pippinger, Kathryn White, Brian Amundson of the City of Eau Claire;
- Scott Schnoberich of the Village of Lake Hallie;
- Derrick Paul and Marcus Kobliska of NPI;
- Dennis Kugle, Dave Olig, and Clifford Wright of NPI's consultant, Gannett Fleming.

Document Review:

The site documents reviewed for this Five-Year Review include the three RODs, the Annual Interim Remedial Action Report for 2006, the April 2007 MRDS SVE System Status Report #7, March 2006 Status Report #3 on the TCE Disposal Area (aka the MW34/70 Area), the 2002 Five-Year Review Report, and other information and correspondence in the WDNR file on the NPI site. Remedial action objectives (RAOs), ARARs and site cleanup levels are found in the RODs.

Data Review

*Plume 1/2 Groundwater*

A review of the laboratory analytical results for groundwater from monitoring wells in and around Plume 1/2 indicates that of the 51 wells sampled at least once from 2002 to 2006 inclusive, 21 wells had no detects for VOCs in the last four samples collected from each well. Many wells have not had detects for at least five years. There has been no regulatory exceedance

for TCA in any well during the period of this review. The compound of concern at this time is mainly TCE.

Twenty-one wells had TCE at concentrations greater than the Wisc. Adm. Code Ch. NR140 preventive action limit (PAL), but less than the enforcement standard (ES). Two wells, MW-38B and RW-3B have TCE at concentrations just over the ES of five micrograms/Liter (ug/L).

Wells that have shown decreases in concentrations of TCE during 2002-06 are MW-34A and MW-70A. These two wells are in close proximity to the recently identified TCE parts cleaner disposal area. The decreasing concentrations most likely relate to the effectiveness of the SVE system constructed in July 2003 in the TCE disposal area. However, wells in this area that might have been expected to show decreases in TCE, but have not are MW-4B, MW-23B, MW-23B and MW-68B. This may be indicative of additional source area not yet identified.

A number of wells have had steady concentrations of TCE from 2001 to 2006, following a period of decreasing concentrations from the early 90s until 2000. Examples include (but are not limited to) RW-3 nest, EC-1, MW-43-A, and RW-16. The two wells with ES exceedances do not show an upward or downward trend during the period of this review. Concentrations of TCE in MW-53A have increased from below detection limit in 2002 to greater than PAL in 2006. Future results from this well should be evaluated carefully.

Groundwater data tables for wells RW-3, MW-34A, and RW-3B are included in the attachments to this report to illustrate the trends discussed above.

*Plume 3/4 Groundwater*

In Plume 3/4, which originates at the MRDS and travels north to Lake Hallie, 25 monitoring wells were sampled at least one time during the 2002-2006 review period. Eighteen of those wells have had no detects of VOCs during the review period. Wells MW-64B and MW-64C, located about 360 feet north of groundwater extraction well EW-1R, have had concentrations of TCE above the PAL during each sampling event this review period. These concentrations have not significantly increased or decreased from 2002 to 2006. Wells MW-29B, immediately south of Lake Hallie, and MW-65B, about 350 feet northwest of EW-1R, have had occasional PAL exceedances for TCE. There are no exceedances of the ES in any monitoring wells in Plume 3/4.

*Plume 5 Groundwater*

Plume 5 which historically migrated from the Eastern Disposal Site (EDS) to Lake Hallie was monitored from 2002 to 2006 by sampling at least one time eight monitoring wells and former supply wells. There have been no detects of any VOCs in any of the wells sampled, except for MW-72 which exceeded the PAL for TCE in July 2002 and October 2004. Since the inception of groundwater sampling the trend for TCE in MW-72 has been downward. There have been no exceedances of the ES in Plume 5. The groundwater data provides evidence for the success of the 1995 removal of contaminated materials from the EDS.

*Groundwater Extraction Wells*

At the MRDS, the extraction wells EW-1R and EW-2 pumped a combined 89.8 million gallons in 2006. This is down somewhat from the 2002 pumpage of 104.28 million gallons. From 2002 to 2006, there have been no detects of VOCs in the groundwater extracted at EW-1R and EW-2. Prior to 2002 there had been very infrequent exceedances of the PAL for TCE. EW-2 had PAL exceedances for PCE prior to 1999, but no detects since. At this time, it is not possible to know whether the lack of contamination in the extracted groundwater is due to lack of contamination in groundwater migrating from under the MRDS or dilution of contaminated groundwater with clean water from down-gradient of the MRDS. A proposed pilot study to shut down EW-1R and EW-2 for 18 months may provide the necessary data to determine whether groundwater under the MRDS is contaminated.

Extraction wells EW-4 and EW-5 are currently operating in the Southwest Corner of the property and are intended to contain the plume from Lagoon #1 and other disposal locations in the immediate vicinity. EW-5 was added to the remedial action in 2004 to provide better containment of the increased TCE concentrations observed in MW-34A, MW-70A and MW-70B. The pump in EW-3 subsequently failed and it was determined to not repair and re-start it. EW-5 appears to be providing adequate capture. In 2006 combined pumpage was 127.19 million gallons, which is an increase from the 102.74 million gallons pumped in 2002.

From 2002 to 2003, TCE concentrations in groundwater extracted at EW-3 ranged from 2.6 to 4.41 ug/L. No other VOCs were detected. At EW-4, from 2002 to 2006, TCE ranged from 0.8 to 2.06 ug/L. TCA was also detected in single digit concentrations, well below the PAL. From 2003 to 2006, EW-5 groundwater had TCE ranging from 0.81 to 1.26 ug/L, with no other VOCs detected.

Overall, in the Southwest Corner, concentrations of contaminants in the extraction wells are similar to the concentrations in the nearby monitoring wells which tend to demonstrate that the extraction wells are working effectively.

*Cascade Aerators and Treated Water Discharged to Surface Water*

A review of laboratory analytical data from the cascade aerator treatment units indicates that removal rates at aerator #2 average 40 to 50 per cent. There is no removal efficiency available for aerator #1 which handles water from EW-1R and EW-2 as there are no VOCs detected in the extracted water. All water discharged to surface water via the storm sewer system is well below surface water discharge standards.

*MRDS SVE System*

Air emissions from the SVE system at the MRDS are sampled monthly and lab analyzed. VOCs that have been detected from 2002 to 2006 include 1,1-Dichloroethane (DCA), 2-Butanone, TCA, Toluene, PCE, and Xylenes. Concentrations are extremely low, generally several orders of magnitude less than the concentration in vapor that could cause a PAL exceedance in groundwater. All concentrations are well below permissible emission standards for air quality. The system currently operates at 570 cubic feet per minute. NPI's consultant, Gannett Fleming,

estimates based on flow rates and vapor concentrations that 141.8 pounds of VOCs have been removed from the MRDS and emitted into the air October 1998 to December 2006.

Twelve vent wells that penetrate the cap and are screened in the vadose zone below the waste are intended to intercept any volatile contamination that may leach or diffuse from the waste downward before it can potentially discharge to groundwater. The vent wells are screened monthly with a flame ionization detector (FID) that detects the presence of contaminant vapors. Readings are most frequently zero except for VW-8 which has had 20 positive readings from 2002 to 2006. When the FID reading is positive a VOC filter is placed on the FID intake and another reading taken. In all cases the filtered reading was the same as the unfiltered reading. The most likely explanation is that the positive reading is caused by methane, but this has not been confirmed by screening with a methane detector.

*Southwest Corner (aka MW-34/70 Area) SVE System*

The SVE system that was constructed in 2003 to address the TCE source area identified in 2002 has operated each year from April until November. Piping runs are above ground so the system must be shut down during the winter. NPI's consultant, Gannett Fleming, estimates that 70 pounds of TCE has been removed since August 2003. A report providing more detailed data about the system operating parameters and air emissions is to be submitted.

Site Inspection:

The site inspection was conducted by Howard Caine, RPM for the U.S. EPA and Eileen Kramer, Hydrogeologist for the WDNR, on January 23, 24 and 25 and June 19 and 20, 2007. At various times, Derrick Paul, Cash Manager of NPI; Marcus Kobliska, Maintenance Supervisor at NPI; Dave Olig and Dennis Kugle, Project Managers with NPI's consultant, Gannett Fleming; and Clifford Wright, Project Engineer of Gannett Fleming participated in the site inspection.

On January 23, the EDS was visited. It is located in the far northeast corner of the NPI property. Waste forge compound had been buried in this area. The waste was removed and incorporated with other waste in the MRDS in accordance with the OU3 ROD. We observed that the area is flat and vegetated with grasses, brush and trees. The monitoring wells in the area appeared to be in good condition, and were locked and labeled. Signs prohibiting trespassing and advising of security patrols were present. Residences are present east of the area.

The MRDS was inspected. There was a light snow cover so the cap inspection was deferred until June. The SVE treatment system building was inspected. The equipment was operating properly. The building is kept locked, there are signs warning of the presence of hazardous materials, and all appeared clean and well maintained. Headers, piping, sampling ports, condensate tank, and meters for the SVE system and the groundwater extraction wells were observed to be in good condition and well maintained. Records, drawings and manuals were present in the building. The fence around the MRDS was in good condition, with a securely locked gate.

The Southwest Corner of the NPI property was observed. The loading dock area is paved with asphalt in good condition. The area that had been Drainage Ditch #3 is paved with an asphalt drive. The SVE system that removes VOCs from the TCE parts cleaner disposal area was observed, although it was not running. It is operated from April to November only because of the above ground piping. The system appeared to be in good condition and well maintained. The well heads of EW-4 and EW-5 were observed. Inspection and meter logs are kept at the well house. The wells were pumping and all facilities appeared to be in good condition and well maintained.

The two cascade aerators were inspected as were the manholes where treated groundwater effluent from the aerators enters the sewer system for eventual discharge to the Chippewa River. All these items were functioning properly, were clean and well maintained.

During the site inspection on June 20, 2007, the MRDS cap was inspected by U.S. EPA and WDNR with a representative of NPI's consultant, Gannett Fleming. The cap is well vegetated with grass and had been recently been mown. The drainage ditches surrounding the capped area were free of debris or other impediments to good drainage. There were no signs of subsidence or slumping of the cap. There were several small (three-four inch diameter) animal burrows observed, which appeared to be the result of a small animal such as a ground squirrel. They did not appear likely to affect the integrity of the cap. One area of erosion was noted on the north side of the cap. This was noted also by the Gannett Fleming representative who indicated that repair would be carried out. On the north side, a small area at the margin of the cap that had been repaired with cobbles to facilitate flow of water away from the foot of the cap was observed. It appeared to be in good condition. No standing water was observed anywhere on or at the foot of the cap, nor in the adjacent run-off basin.

Groundwater sampling procedures were observed at several monitoring wells. Good sample collection and decontamination procedures were followed in accordance with the site groundwater sampling plan. Several of the water table monitoring wells (for example, EC-2) did not have enough water to allow use of the usual Grundfos sampling pump and it was necessary to use a bailer to purge and sample the well.

Several groundwater monitoring wells were observed to require attention. The MW-38 nest in particular is flush mounted and located in a ditch in highway right of way (ROW). Concrete surface seals were heaved, the A and C wells did not have locks, and water was present in the space between the well riser and the steel protective top. Several other wells require labels, locks or seal repair. These are listed in an attachment to this report. Most wells were in good condition, properly labeled, locked and having good surface seals.

Interviews:

The following interviews were conducted:

- Derrick Paul, NPI, Cash Manager and the site O&M Manager. Mr. Paul has been the primary contact person at NPI. His impressions are that over the past five years the work has been somewhat routine. Some past communications from U.S. EPA have been slow,

but have recently improved. He has not received any complaints or concerns from members of the community.

- Marcus Kobliska, NPI, Maintenance Supervisor. Mr. Kobliska oversees or performs some of the operations and maintenance at the NPI property. He provides a field truck and deionized water for groundwater sampling. Cleanout of the waste water discharge lines and electrical work related to the remedies are contracted out. With direction from NPI's consultant, Gannett Fleming, he collects samples from the cascade aerators, discharge line manholes, and pumping wells. Sometimes he receives a casual inquiry from a nearby property owner as to how long the cleanup will take.

- Jeff Pippinger, City of Eau Claire, Utilities Administrator. Mr. Pippinger is favorably impressed with the Superfund cleanup process, and believes there has been good communication. He would like to receive the NPI annual reports each year. During the latter part of 2007, the City will be evaluating water needs for the next 20 years. This could possibly include additional supply wells.

- Scott Schnobrich, Village of Lake Hallie Public Works, Certified Water Technician. Mr. Schnobrich is in charge of the operation of the Village water system. He expressed no complaints or concerns about the Superfund cleanup process. He would like to routinely receive groundwater data about the parts of the NPI contamination that has impacted Hallie. The Village will be constructing a new supply well in the near future. They have been working with the WDNR water supply program staff regarding appropriate siting of the well.

- Several residential neighbors east of the NPI property were interviewed. Neither expressed concerns about the NPI cleanup. No instances of trespassing on the NPI property had been observed.

## VII. TECHNICAL ASSESSMENT

Question A: Is the remedy functioning as intended by the decision documents?

Yes. Review of the groundwater monitoring results, remedial systems operations data, and the site inspection provide evidence that the selected engineered remedies are functioning as intended by the RODs. Although the ICs are not fully implemented, the objectives of the ICs are being met. No inappropriate site or media uses have been noted during the inspection or interviews.

Capping of the MRDS and the installation and operation of the SVE system over the past nine years have effectively contained and controlled discharge of contaminants from the waste material in the MRDS. The cap has been maintained as required. There have not been increases in groundwater contaminant concentrations down-gradient of the MRDS indicating that the cap and SVE system are functioning well, and any potential contamination from the MRDS is being effectively contained by the extraction wells. The ROD for OU3 requires that a deed instrument be implemented to prevent activity that would damage the MRDS cap. That deed instrument has

not been implemented. Therefore, for OU3, the remedy is not fully implemented. No other ICs, such as controls to prohibit the use of groundwater, have been implemented for the NPI property.

Groundwater monitoring wells down-gradient of the Southwest Corner demonstrate that waste removal from the source areas and containment by the groundwater extraction wells of groundwater contaminants are effective. Groundwater at MW-53A bears watching to determine whether an upward trend in TCE concentrations may be present. Apparent changes in concentrations can sometimes be due to changes in water table elevations.

Monitoring wells at and down-gradient of the EDS provide evidence that the removal of waste from the area has been effective in minimizing or preventing discharge of contaminants to the groundwater.

This review has verified that the Village of Lake Hallie has an ordinance in place that prohibits the installation of private wells and a permit program for those residents who have retained their private wells for non-potable uses. The City of Eau Claire does not allow cross connections between private wells and the municipal water supply. The City is in the process of implementing an ordinance to restrict construction of new private water supply wells. Any new private wells will require review and approval.

The monitoring well network that is in place both on and off the NPI property provide the data needed to assess the effectiveness of the selected remedies. The agencies and NPI are in the process of modifying the groundwater monitoring network and plan that will very likely streamline work and reduce costs.

Much of the NPI property is fenced with chain link fence. There are signs present on all sides of the property prohibiting trespassing. A security organization patrols the property for intrusion.

The persistent concentrations of TCE in several wells near the Southwest Corner may indicate the presence of a minor as yet unidentified source in their vicinity. This area warrants additional investigation. The current extraction wells in this area are containing these contaminants.

Question B: Are the exposure assumptions, toxicity data, cleanup levels, and remedial action objectives (RAOs) used at the time of the remedy still valid?

Yes. There have been no changes in the physical conditions of the site that would affect the protectiveness of the selected remedies at these sites. Neither has there been any substantive change in the use of the property during the last five years. There have been no changes in land use near the site, nor are changes expected in the near future. There have been no newly observed species or ecologic settings. Potential exposure scenarios remain the same.

There have been no changes in either the contaminant characteristics/toxicity or the federal (SDWA) or state (NR 140) standards for protection of groundwater as they relate to the contaminants of concern at these sites. Standard risk assessment methods have not changed in a way that would affect the protectiveness of the remedies at this site.

Four new areas of contamination were identified subsequent to the 1996 Final Remedy ROD - the east extension of former Lagoon #1, the southwest property corner, the southwest corner of former Lagoon #2, and the loading dock area. Contamination in each area has been addressed. The waste forge compound mixed with soil in the east extension of Lagoon #1 and the small volume of contaminated surficial soils at the southwest property corner were excavated and consolidated under the cap at the MRDS. A report on the southwestern corner of Lagoon #2 has been submitted to the agencies. Reporting on the removal of the loading dock soil (1200 cubic yards) needs to be finalized.

In general, contaminant concentrations in groundwater are stable or continue to decline at the NPI site. The selected remedies have been and continue to be effective in protecting human health and the environment.

Question C: Has any other information come to light that could call into question the protectiveness of the remedies?

No. No new information has come to light in the last five years that would call into question the protectiveness of the selected remedies at the NPI site. While some additional source area has been identified in the Southwest Corner, it has been investigated and remediation is in operation. There have been no newly discovered ecological risks. There have been no significant impacts from natural disasters.

Summary of Technical Assessment:

Based on the data reviewed, the site inspection and the interviews, the remedies for the NPI sites are functioning as intended by the RODs, with the exception of recording of a deed instrument protecting the MRDS cap for OU3. There have been no changes in the physical conditions or exposure scenarios of the sites that would affect the protectiveness of the remedies. There have been no changes in the groundwater standards, either federal or state, for the contaminants of concern that would affect protectiveness at this site.

## VIII. ISSUES

The following issues related to the site affect current or future protectiveness of the remedy and require attention:

**Table 5: Issues**

| Issue | Currently Affects Protectiveness | Affects Future Protectiveness |
|---|---|---|
| VOC concentrations in MW-4B, MW-23A, MW-23B, and MW-68B are not decreasing as anticipated possibly indicating a small unidentified source area in the Southwest Corner of the NPI property. | No | Yes |
| Some of the ICs have not been implemented; implementing and maintaining ICs is required to assure that the remedy continues to function as intended for Site protectiveness. Also, the existing ICs have not been evaluated. A review of the institutional controls is needed to assure that the remedy is functioning as intended with regard to the ICs and to ensure effective procedures are in-place for long-term stewardship at the Site. | No | Yes |
| Long-term stewardship must be assured which includes maintaining and monitoring effective ICs | No | Yes |

This review also notes several other concerns that must be resolved, but that do not affect protectiveness of the remedy. They are:

- Proposed revisions to the groundwater monitoring plan are to be finalized.
- A number of monitoring wells are no longer needed, including several Hallie private supply wells that were retained for use as monitoring points. Wells that are determined to not be necessary should be abandoned.
- NPI's proposal to perform a pilot shut down of MRDS groundwater extraction wells and criteria for evaluation of results need to be finalized.
- Documentation of removal of waste forge compound/soil mixture at the new loading dock needs to be finalized and submitted to the agencies.
- A number of groundwater monitoring wells need to be labeled, repaired, and/or have locks installed.

## IX. Recommendations and Follow-up Actions

To maintain protectiveness of the remedy the following recommendations are made:

**Table 6: Recommendations and Follow-up Actions**

| Issue | Recommendations & Follow-up Actions | Party Responsible | Oversight Agency | Milestone Date | Affects Protectiveness | |
|---|---|---|---|---|---|---|
| | | | | | Current | Future |
| VOC concentrations in MW-4B, MW-23A, MW-23B and MW-68B are not decreasing as anticipated possibly indicating a small unidentified source area in the Southwest Corner of the NPI property. | NPI should submit a workplan for conducting additional investigation to determine if there is previously unidentified source in the Southwest Corner | NPI | U.S. EPA WDNR | March 2008 | No | Yes |
| Some of the ICs have not been implemented; implementing and maintaining ICs is required to assure that the remedy continues to function as intended for Site protectiveness. Also, the existing ICs have not been evaluated. A review of the ICs is needed to assure that the remedy is functioning as intended with regard to the ICs and to ensure effective procedures are in-place for long-term stewardship at the Site. | NPI to complete IC study* required by U.S. EPA and submit a workplan for implementing the ICs. | NPI | U.S. EPA WDNR | March 2008 | No | Yes |
| Long-term stewardship must be assured which includes maintaining and monitoring effective ICs. | Prepare IC plan to incorporate results of IC study and plan for additional activities as needed, for IC implementation and long-term stewardship | U.S EPA | | Within 6 months of NPI's submission of IC study/ workplan | No | Yes |

* IC evaluation activities including preparation of IC maps, performing title work and assessing ownership and encumbrances, reviewing ordinances for effectiveness and planning for long-term Site stewardship by updating O&M Plan.

Other concerns noted by this review should be addressed as follows:

**Table 7: Other Recommendations**

| Concern | Recommendation | To Be Done By | Over-Sight By | Target Date |
|---|---|---|---|---|
| Groundwater monitoring plan | NPI to respond to issues raised by U.S. EPA and WDNR during the January 24, 2007 meeting. All parties to work toward finalizing new sampling plan. | NPI | U.S. EPA WDNR | Dec. 2008 |
| Monitoring well network and well abandonments | Agencies to review list of wells proposed for abandonment by NPI. Also, it should be determined whether old Hallie supply wells that had been used for monitoring can be abandoned. | U.S. EPA WDNR NPI | U.S. EPA WDNR | June 2009 |
| MRDS EW shut-down pilot study | NPI to submit proposal for evaluation of and response to groundwater data during pilot study. | NPI | U.S. EPA WDNR | Dec. 2007 |
| Monitoring wells needing attention | Seven monitoring wells require locks, labels, or repair. List attached. | NPI | U.S. EPA WDNR | Aug. 2008 |

## X. STATEMENT OF PROTECTIVENESS

OU1: Interim Action, Plume Containment at MRDS & SW Corner

The remedy for OU1 is considered protective in the short term because there is no evidence that there is current exposure. Long term protectiveness of the groundwater will occur after the cleanup levels have been attained. In the interim, ICs must be in place to prevent exposure to contaminants until groundwater cleanup standards are achieved. Within six months, an IC implementation and monitoring plan will be developed to prevent exposure to existing contaminant levels.

OU2: Hallie Public Water Supply & Annexation/Hook-up to Eau Claire Municipal Water Supply

The remedy for OU2 is considered protective in the short term because there is no evidence that there is a current exposure. Long term protectiveness of the groundwater will occur after cleanup levels in the groundwater are attained. In the interim, ICs must be in place to prevent exposure to contaminants until groundwater cleanup standards are achieved. By March 2008, an IC implementation and monitoring plan will be developed to prevent exposure to existing contaminant levels.

OU3: Waste Removal from Source Areas, SVE & Cap at MRDS and Long-term Groundwater Monitoring

The remedy for OU3 is considered protective in the short term because there is no evidence that there is current exposure. Long term protectiveness of the waste removals and MRDS will occur after groundwater on and from the NPI property attains clean up standards. In addition, the deed instrument required by the OU3 ROD to prevent disturbance of the MRDS cap is needed to

assure long term protectiveness. A determination as to what ICs are needed for long term protectiveness of the OU3 remedy is pending completion of the IC Study by NPI in March 2008.

Summary Protectiveness Statement

The remedial actions at OUs 1, 2 and 3 are protective in the short term. However, long term protectiveness for OUs 1, 2 and 3 will not be achieved until groundwater clean up standards are met and effective institutional controls (ICs) are implemented and complied with. Long-term protectiveness will be ensured by implementing and maintaining effective ICs as well as maintaining the site remedy components. Certain institutional controls developed by the Village of Lake Hallie and the City of Eau Claire are in place and operate to protect against exposure to contaminated groundwater and interference with the groundwater remedies. Implementation of appropriate restrictive covenants to prevent interference with the landfill cap is required. Restrictive covenants to prevent interference with groundwater and other remedy components may also be required. Also, an IC Study needs to be completed by NPI for all three OUs and the ECMWF. NPI has agreed to conduct an IC Study to evaluate the effectiveness of current institutional controls and the need for additional controls on or before March 2008. Long-term stewardship must be ensured to verify compliance with ICs.

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## XI. NEXT FIVE-YEAR REVIEW

The next Five-Year Review will be due five years from the signature date of this report.

## Attachments

Figures
Groundwater Monitoring Data
Site Inspection Checklist
Photographs
Interview Report
Public Notice of Five Year Review
Communications Regarding IC Study
Copies of ICs

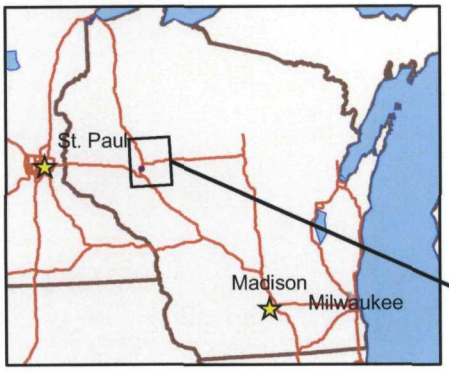
## Figures

## Site Location

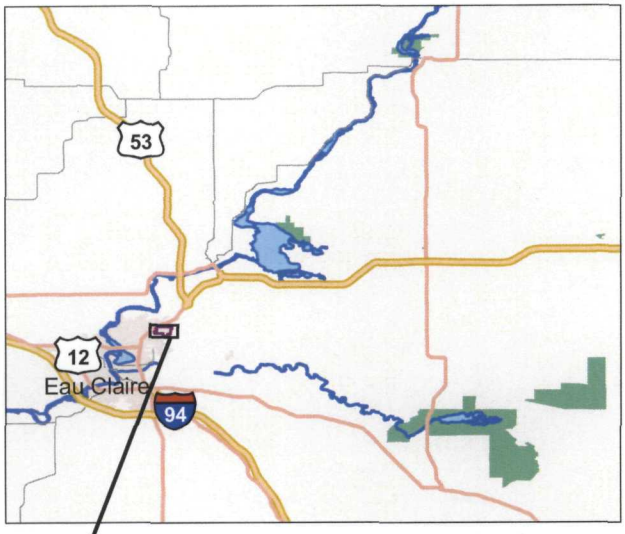
Superfund
U.S. Environmental Protection Agency

# National Presto Industries
# Chippewa County, WI

**WID006196174**




**State**




**County**


**Site**

Figure 1

Produced by Sarah Backhouse
U.S. EPA Region 5 on 6/18/07
Image Date: 2005

N

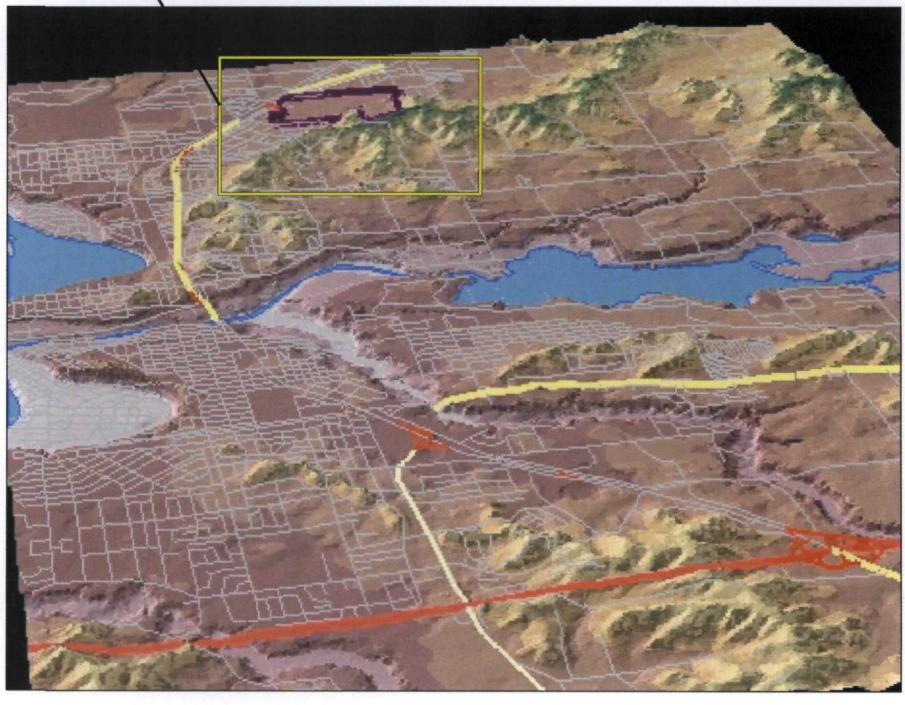
GEOS
Groundwater Evaluation and Optimization System

# 3D Surface Terrain Model

Superfund
U.S. Environmental Protection Agency

## National Presto Industries
## Chippewa County, WI

**WID006196174**

**Elevation Feet**

- 1100 - 1142
- 1057 - 1100
- 1015 - 1057
- 972 - 1015
- 930 - 972
- 887 - 930
- 845 - 887
- 802 - 845
- 760 - 802

N

GEOS
Groundwater Evaluation and Optimization System

Figure 2

Produced by Sarah Backhouse
U.S. EPA Region 5 on 6/20/07
Image Date: 2005

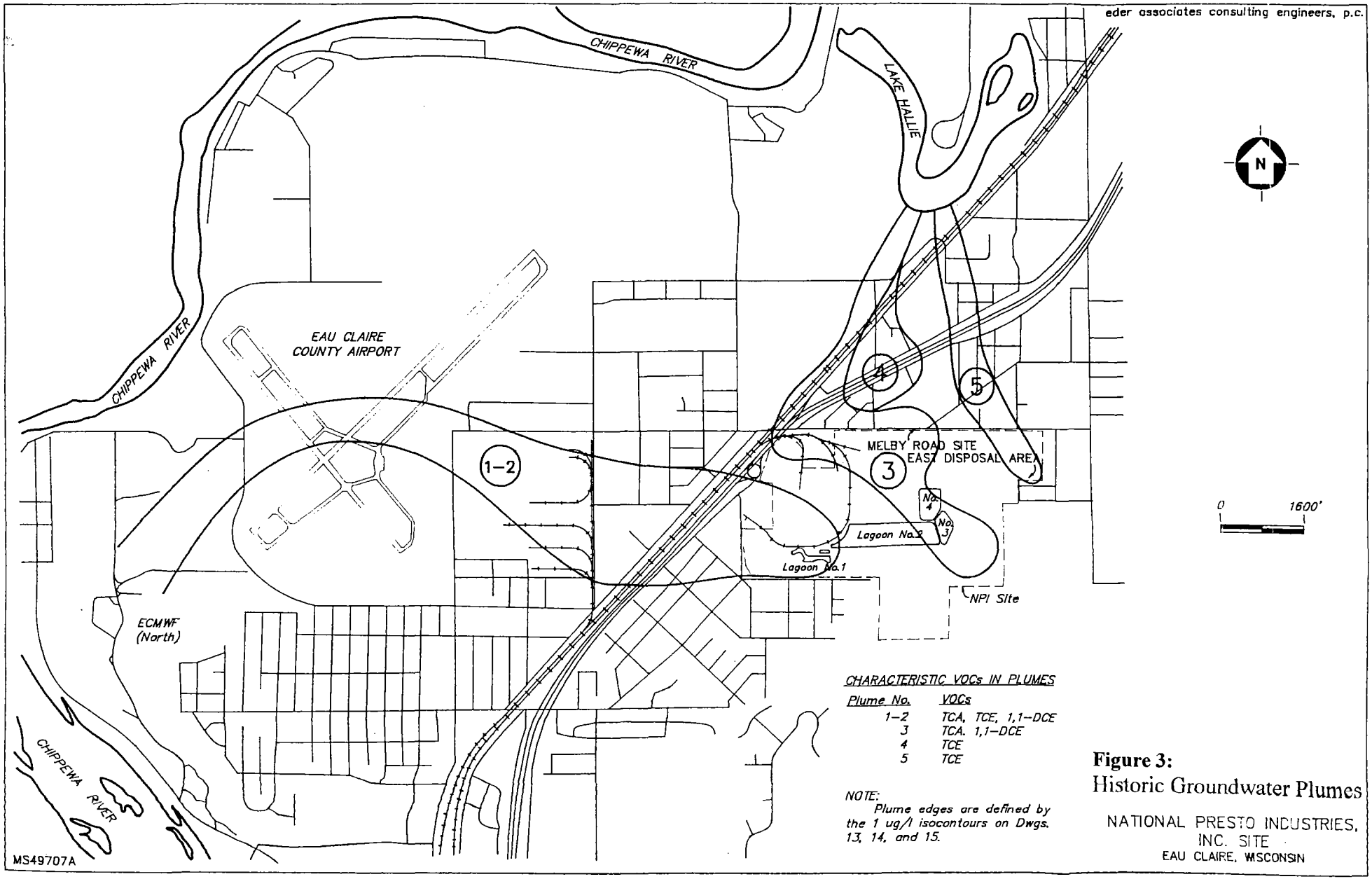
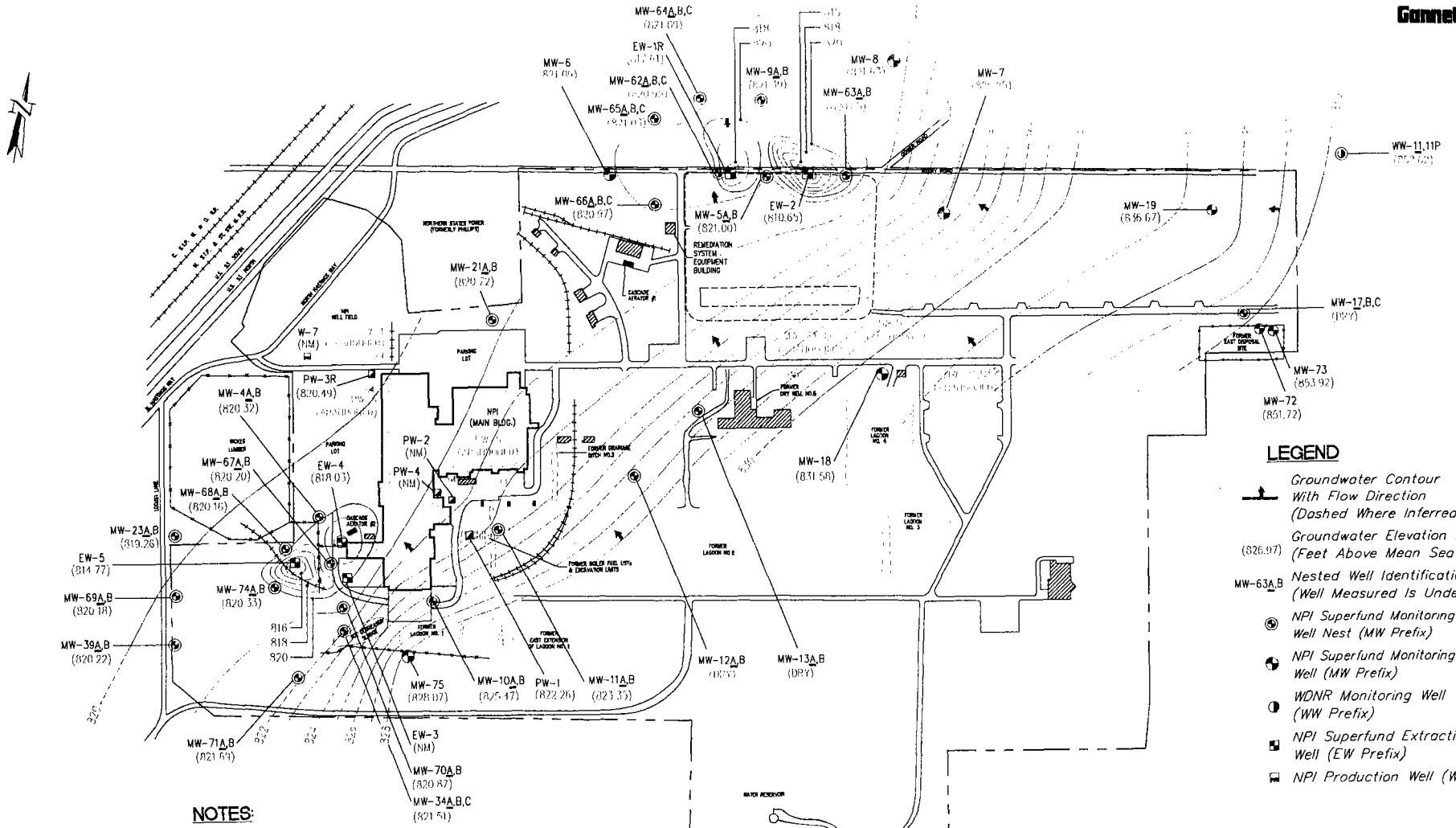



**Figure 3:**
Historic Groundwater Plumes

NATIONAL PRESTO INDUSTRIES, INC. SITE
EAU CLAIRE, WISCONSIN

Gannett Fleming




## LEGEND

- Groundwater Contour With Flow Direction (Dashed Where Inferred)
- (826.97) Groundwater Elevation At Well (Feet Above Mean Sea Level)
- MW-63A,B Nested Well Identification (Well Measured Is Underlined)
- NPI Superfund Monitoring Well Nest (MW Prefix)
- NPI Superfund Monitoring Well (MW Prefix)
- WDNR Monitoring Well (WW Prefix)
- NPI Superfund Extraction Well (EW Prefix)
- NPI Production Well (W Prefix)

## NOTES:

1. Groundwater Elevations Measured On October 17, 2006.
2. EW-3 Was Replaced By EW-5 On January 7, 2004.
3. NM = Not Measured.
4. Contours Above 830 Are Shown At 5 Foot Intervals. Contours Below 830 Are Shown At 1 Foot Intervals.

0 500

Approximate Scale In Feet

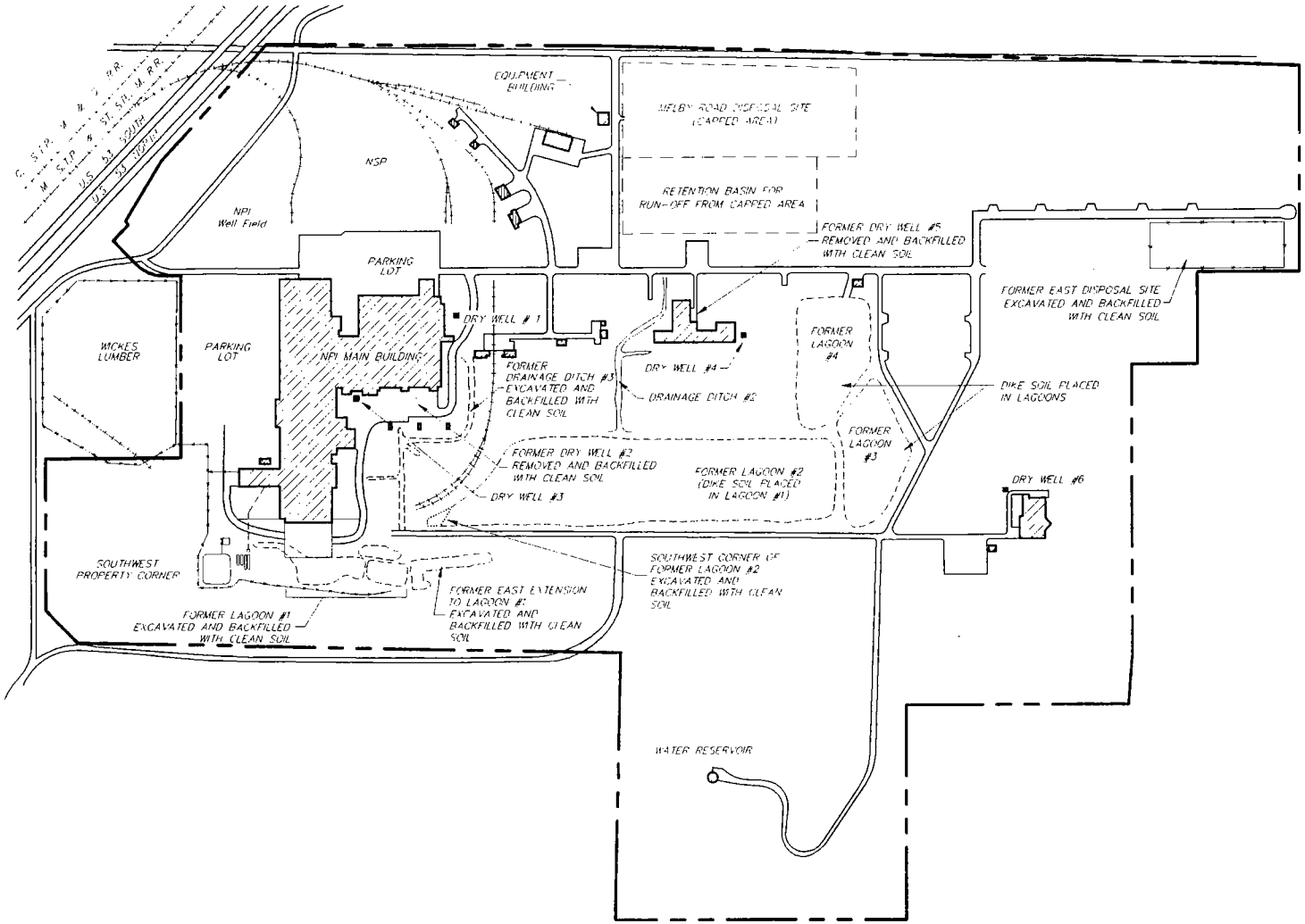
Figure 4: NPI Groundwater Flow Map

(OCTOBER 2006)

2006 ANNUAL REPORT
NATIONAL PRESTO INDUSTRIES, INC.
EAU CLAIRE, WISCONSIN

:W 2006_10-17
:1307
:283WAI

Gannett Fleming




0 500

Approximate Scale In Feet

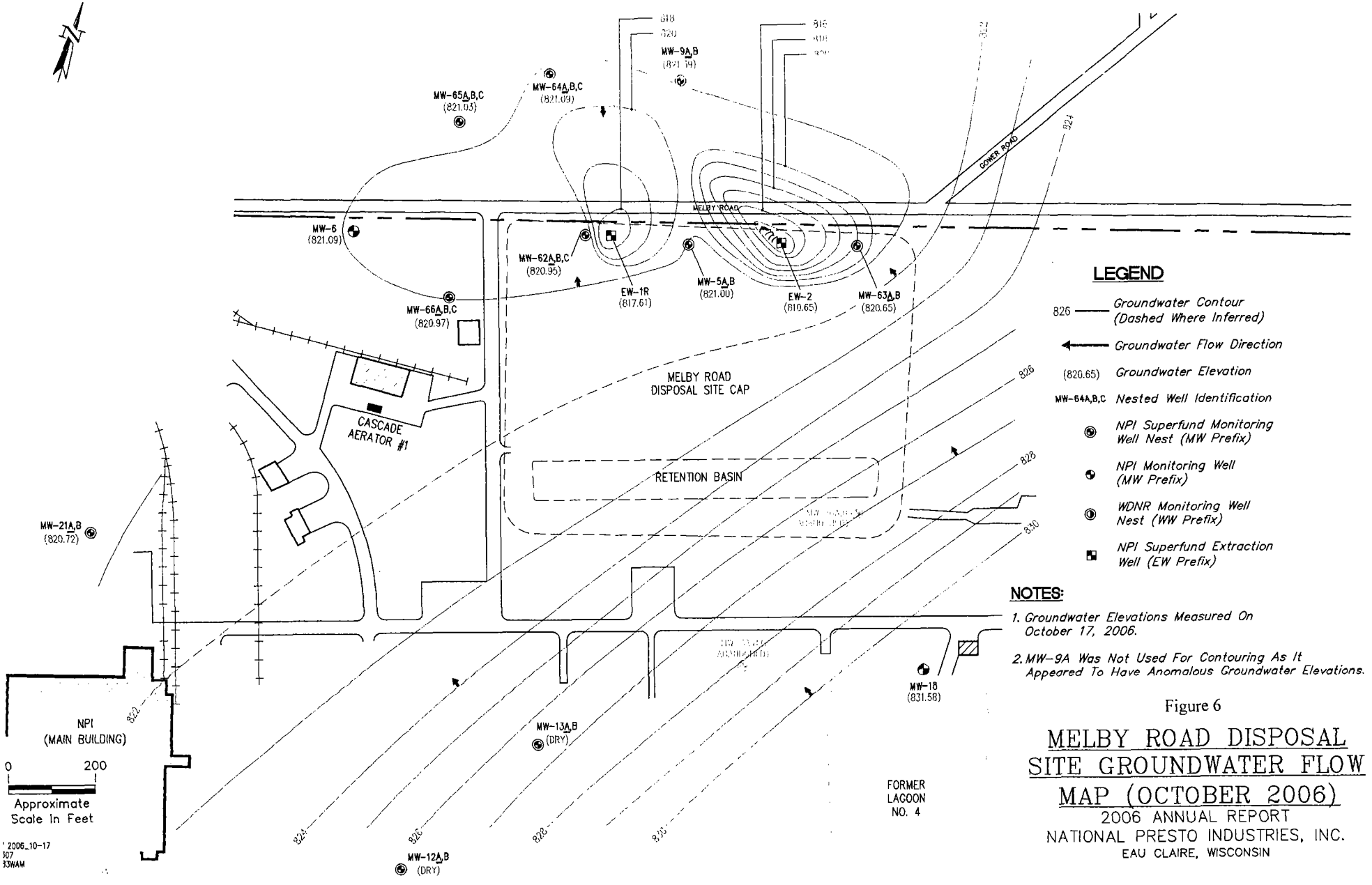
012203
342B6WDF_REV

Figure 5

SITE PLAN

FIVE-YEAR REVIEW REPORT
NATIONAL PRESTO INDUSTRIES, INC.
EAU CLAIRE, WISCONSIN

Gannett Fleming




## LEGEND

- 826 — Groundwater Contour (Dashed Where Inferred)
- Groundwater Flow Direction
- (820.65) Groundwater Elevation
- MW-64A,B,C Nested Well Identification
- NPI Superfund Monitoring Well Nest (MW Prefix)
- NPI Monitoring Well (MW Prefix)
- WDNR Monitoring Well Nest (WW Prefix)
- NPI Superfund Extraction Well (EW Prefix)

## NOTES:

1. Groundwater Elevations Measured On October 17, 2006.
2. MW-9A Was Not Used For Contouring As It Appeared To Have Anomalous Groundwater Elevations.

Figure 6

# MELBY ROAD DISPOSAL SITE GROUNDWATER FLOW MAP (OCTOBER 2006)

2006 ANNUAL REPORT
NATIONAL PRESTO INDUSTRIES, INC.
EAU CLAIRE, WISCONSIN

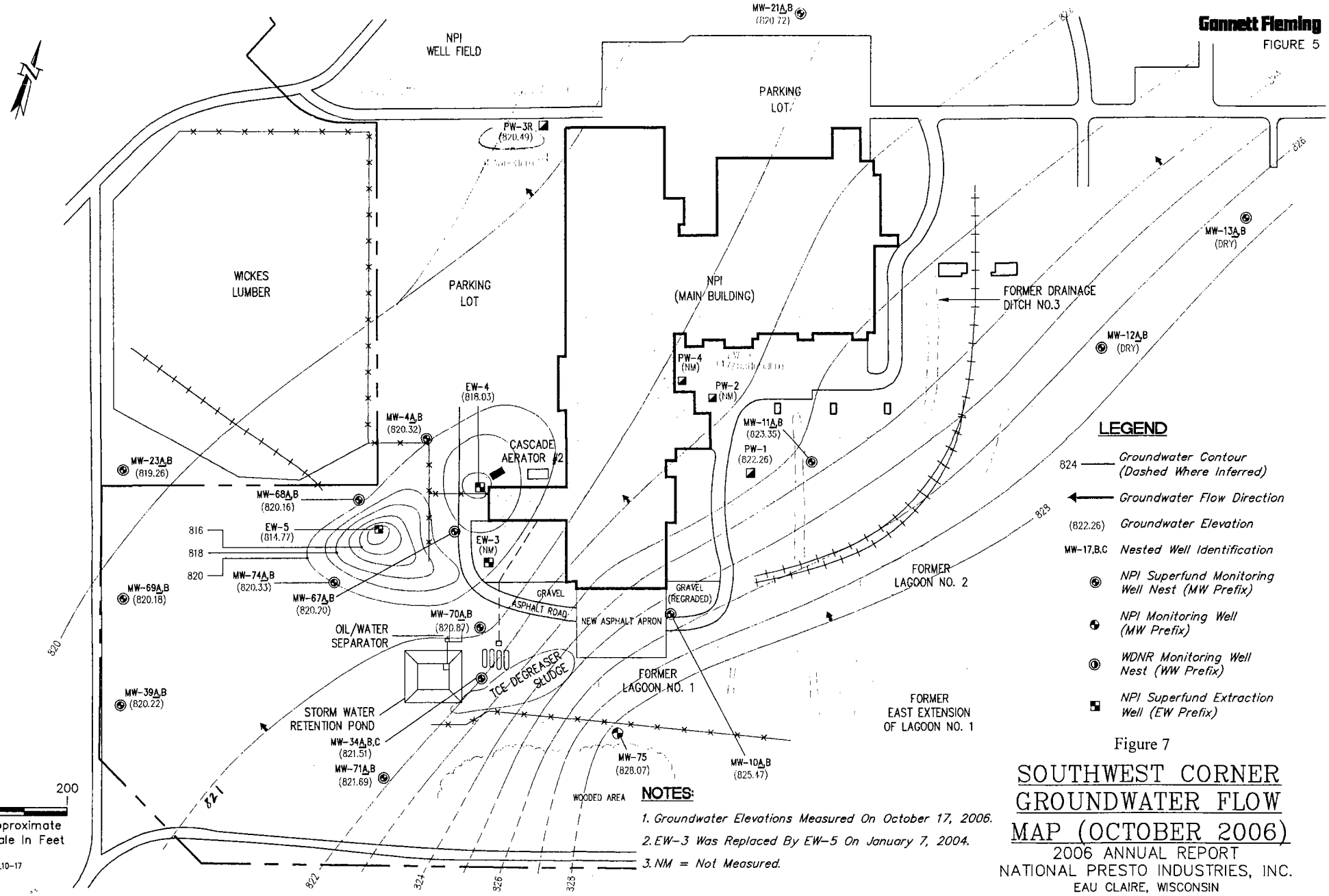



Figure 7

# SOUTHWEST CORNER GROUNDWATER FLOW MAP (OCTOBER 2006)

2006 ANNUAL REPORT
NATIONAL PRESTO INDUSTRIES, INC.
EAU CLAIRE, WISCONSIN

Groundwater
Monitoring
Data

**Gannett Fleming**

ANALYTICAL RESULTS FROM PLUME 1/2 MONITORING WELLS

| Date | MW-4B | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1, 1 - DCA | | 1, 1 - DCE | | PCE | | 1, 1, 1 - TCA | | TCE | |
| MCL/ES/PAL Limitations | None/850/85 | | 7/7/0.7 | | 5/5/0.5 | | 200/200/40 | | 5/5/0.5 | |
| 06/01/90 | 7 | | 0.2 | J | 0.2 | J | 24 | | **0.7** | |
| 07/01/90 | 5 | | 0.4 | | 0.4 | | 32 | | **0.9** | |
| 04/01/91 | 9 | | 0.2 | U | **0.5** | | 34 | | 1 | U |
| 02/08/94 | 0.1 | ND | 0.1 | ND | 0.1 | ND | 0.09 | | 0.1 | |
| 03/28/94 | 2.1 | | 0.1 | ND | 0.1 | ND | 4.1 | | **1** | |
| 06/06/94 | 7.6 | | **1.2** | | 0.1 | ND | **58** | | **5.6** | |
| 08/23/94 | 2.8 | | 0.1 | ND | 0.1 | ND | 28 | | **3.7** | |
| 10/27/94 | 1.5 | | 0.1 | ND | 0.1 | ND | 14 | | **3.1** | |
| 01/19/95 | 0.1 | ND | 0.1 | ND | 0.1 | ND | 6.5 | | **3.3** | |
| 04/19/95 | 0.1 | ND | 0.1 | ND | 0.1 | ND | 2.3 | | **1** | |
| 07/18/95 | 0.1 | ND | 0.1 | ND | 0.1 | ND | 4.2 | | **2.6** | |
| 10/09/95 | 0.1 | ND | 0.1 | ND | 0.1 | ND | 3.6 | | **3.9** | |
| 01/08/96 | 0.1 | ND | 0.1 | ND | 0.1 | ND | 1.6 | | **3.7** | |
| 04/17/96 | 0.1 | ND | 0.1 | ND | 0.1 | ND | 1.7 | | **1.8** | |
| 07/09/96 | 0.1 | ND | 0.1 | ND | 0.1 | ND | 0.72 | | 0.18 | ND |
| 10/02/96 | 0.1 | ND | 0.1 | ND | 0.3 | | 1.1 | | **2.6** | |
| 04/01/97 | 0.1 | ND | 0.1 | ND | 0.1 | ND | 0.756 | | 0.442 | |
| 05/20/97 | 0.1 | ND | 0.1 | ND | 0.1 | ND | 0.52 | | **0.66** | |
| 07/22/97 | 0.1 | ND | 0.1 | ND | 0.1 | ND | 0.54 | | **0.807** | |
| 10/23/97 | 0.2 | U | 0.25 | U | 0.3 | U | 0.924 | | **1.45** | |
| 01/27/98 | 0.1 | U | 0.1 | U | 0.1 | U | 0.902 | | **0.797** | |
| 04/22/98 | 0.1 | U | 0.1 | U | 0.1 | U | 0.77 | | **2.06** | |
| 07/20/98 | 0.532 | | 0.1 | U | 0.1 | U | 5.61 | | **0.975** | |
| 10/26/98 | 0.1 | U | 0.1 | U | 0.1 | U | 0.465 | | **1.4** | |
| 01/18/99 | 0.1 | U | 0.1 | U | 0.1 | U | 0.563 | J | **0.92** | |
| 04/12/99 | 0.1 | U | 0.1 | U | 0.1 | U | 0.443 | J | **1.45** | CSH |
| 07/27/99 | 0.191 | J | 0.075 | U | 0.213 | J | 0.942 | | **2.46** | |
| 10/06/99 | 0.164 | J | 0.075 | U | 0.075 | U | 0.764 | | **2.48** | |
| 02/01/00 | 0.075 | U | 0.075 | U | 0.075 | U, CSL | 0.075 | U | **0.617** | J |
| 06/06/00 | 0.075 | U | 0.075 | U | 0.075 | U | 0.552 | | **1.68** | |
| 07/18/00 | 0.075 | U | 0.075 | U | 0.075 | U | 0.075 | U | **0.626** | J |
| 10/11/00 | 0.075 | U, CSH, SPH | 0.075 | U | 0.075 | U | 0.075 | U | 0.2 | U |
| 01/24/01 | 0.075 | U, SPH | 0.075 | U | 0.075 | U | 0.075 | U, SPH | **0.538** | J |
| 05/09/01 | 0.075 | U | 0.075 | U | 0.075 | U | 0.075 | U | 0.2 | U |
| 07/17/01 | 0.19 | U | 0.19 | U | 0.13 | U | 0.435 | J | **2.03** | |
| 10/18/01 | 0.19 | U | 0.19 | U | 0.13 | U | 0.1 | U | **1.63** | |
| 01/09/02 | 0.19 | U | 0.19 | U | 0.13 | U | 0.1 | U | 0.429 | J |
| 04/22/02 | 0.18 | U | 0.195 | U | 0.16 | U | 0.21 | U | **2.03** | |
| 07/09/02 | 0.18 | U | 0.195 | U | 0.16 | U | 0.23 | J | **2.37** | |
| 10/22/02 | 0.18 | U | 0.195 | U | 0.16 | U | 0.21 | U | **1.99** | Dup |
| 01/06/03 | 0.18 | U | 0.195 | U | 0.16 | U | 0.21 | U | **1.22** | |
| 04/09/03 | 0.18 | U | 0.195 | U | 0.16 | U | 0.21 | U | **0.65** | CSH |
| 10/07/03 | 0.18 | U | 0.195 | U | 0.16 | U | 0.449 | J | **2.29** | |
| 02/24/04 | 0.25 | U | 0.25 | U | 0.225 | U | 0.21 | U | **1.48** | J |
| 03/16/04 | 0.25 | U | 0.25 | U | 0.225 | U | 0.21 | U | **1.47** | J |
| 04/13/04 | 0.25 | U | 0.25 | U | 0.225 | U | 0.21 | U | **1.43** | J |
| 05/24/04 | 0.25 | U | 0.25 | U | 0.225 | U | 0.21 | U | **1.48** | J |

ANALYTICAL RESULTS FROM PLUME 1/2 MONITORING WELLS

| Date | MW-4B | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1, 1 - DCA | | 1, 1 - DCE | | PCE | | 1, 1, 1 - TCA | | TCE | |
| MCL/ES/PAL Limitations | None/850/85 | | 7/7/0.7 | | 5/5/0.5 | | 200/200/40 | | 5/5/0.5 | |
| 06/22/04 | 0.25 | U | 0.25 | U | 0.225 | U | 0.21 | U | **1.55** | J |
| 10/18/04 | 0.25 | U | 0.25 | U | 0.225 | U | 0.21 | U | **1.86** | |
| 04/14/05 | 0.25 | U | 0.25 | U | 0.225 | U | 0.21 | U | **1.64** | J |
| 10/11/05 | 0.25 | U | 0.25 | U | 0.225 | U | 0.21 | U | **1.53** | J |
| 04/17/06 | 0.25 | U | 0.25 | U | 0.225 | U | 0.609 | J | **2.14** | |
| 10/17/06 | 0.075 | U, CSL | 0.075 | U | 0.05 | U | 0.79 | | **1.19** | |

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ANALYTICAL RESULTS FROM PLUME 1/2 MONITORING WELLS

| Date | MW-11A | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1, 1 - DCA | | 1, 1 - DCE | | PCE | | 1, 1, 1 - TCA | | TCE | |
| MCL/ES/PAL Limitations | None/850/85 | | 7/7/0.7 | | 5/5/0.5 | | 200/200/40 | | 5/5/0.5 | |
| 1/88 | 1.8 | | 0.12 | U | 0.075 | U | 29 | D | 0.075 | U |
| 10/88 | 9.4 | | 0.51 | J | 0.43 | | **91** | D | **0.87** | |
| 4/91 | 7 | | 0.4 | | **0.5** | | **110** | D | 0.5 | U |
| 10/27/94 | 13 | | 0.1 | ND | 0.1 | ND | **180** | | **1.4** | |
| 01/19/95 | | NS | | NS | | NS | | NS | | NS |
| 04/19/95 | 0.1 | ND | 0.1 | ND | 0.1 | ND | 6.6 | | 0.18 | ND |
| 07/18/95 | | NS | | NS | | NS | | NS | | NS |
| 10/09/95 | 6.7 | | **2.5** | | 0.1 | ND | **130** | | **2.5** | |
| 04/17/96 | 0.86 | | 0.1 | ND | 0.34 | | 9.4 | | 0.44 | |
| 10/01/96 | 0.1 | ND | 0.1 | ND | 0.22 | | 2.3 | | 0.22 | |
| 05/20/97 | 0.1 | ND | 0.1 | ND | 0.1 | ND | 0.13 | | 0.18 | ND |
| 10/22/97 | 1.56 | | 0.25 | U | 0.3 | U | 7.34 | | 0.2 | U |
| 04/21/98 | 1.72 | | 0.1 | U | 0.1 | U | 9.7 | | 0.18 | U |
| 10/27/98 | 0.1 | U | 0.1 | U | 0.216 | | 1.16 | | 0.18 | U |
| 04/12/99 | 0.1 | U | 0.1 | U | 0.1 | U | 0.678 | | 0.18 | U |
| 10/06/99 | 0.075 | U | 0.075 | U | 0.075 | U | 1.26 | | 0.05 | U SPL, Dup |
| 05/08/01 | 0.075 | U | 0.075 | U | 0.075 | U | 0.473 | J | 0.2 | U, CSL |
| 10/16/01 | 0.19 | U | 0.19 | U | 0.13 | U | 0.207 | J | 0.13 | U |
| 04/22/02 | 0.18 | U | 0.195 | U | 0.16 | U | 0.577 | J | 0.18 | U |
| 10/22/02 | 0.18 | U | 0.195 | U | 0.16 | U | 0.715 | J | 0.18 | U |
| 04/11/05 | 0.25 | U | 0.2 | U | 0.225 | U | 0.21 | U | 0.25 | U |
| 07/12/05 | 0.25 | U | 0.25 | U | 0.225 | U | 0.21 | U | 0.25 | U |

**Gannett Fleming**

ANALYTICAL RESULTS FROM PLUME 1/2 MONITORING WELLS

| Date | MW-11B | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1, 1 - DCA | | 1, 1 - DCE | | PCE | | 1, 1, 1 - TCA | | TCE | |
| MCL/ES/PAL Limitations | None/850/85 | | 7/7/0.7 | | 5/5/0.5 | | 200/200/40 | | 5/5/0.5 | |
| 1/88 | 0.12 | U | 0.12 | U | 0.075 | U | 0.075 | U | 0.075 | U |
| 10/88 | 0.12 | U | 0.145 | U | 0.17 | U | 0.27 | J | 0.105 | U |
| 4/91 | 0.1 | U | 0.15 | U | 0.15 | U | 0.2 | U | 0.1 | U |
| 10/27/94 | 0.1 | ND | | ND | 0.1 | ND | 0.1 | ND | 0.18 | ND |
| 04/19/95 | 0.1 | ND | | ND | 0.1 | ND | 0.1 | ND | 0.18 | ND |
| 10/09/95 | 0.1 | ND | | ND | 0.1 | ND | 0.1 | ND | 0.18 | ND |
| 04/17/96 | 0.1 | ND | | ND | 0.1 | ND | 0.22 | | 0.18 | ND |
| 10/01/96 | 0.1 | ND | 0.1 | ND | 0.18 | | 0.29 | | 0.16 | |
| 05/20/97 | 0.1 | ND | 0.1 | ND | 0.1 | ND | 0.18 | | 0.18 | ND |
| 10/22/97 | 0.2 | U | 0.25 | U | 0.3 | U | 0.35 | U | 0.2 | U |
| 04/21/98 | 0.1 | U | 0.1 | U | 0.1 | U | 0.268 | | 0.18 | U |
| 10/27/98 | 0.1 | U | 0.1 | U | 0.1 | U | 0.1 | U | 0.18 | U |
| 04/12/99 | 0.1 | U | 0.1 | U | 0.1 | U | 0.1 | U | 0.18 | U |
| 10/06/99 | 0.075 | U | 0.075 | U | 0.075 | U | 0.438 | J | 0.05 | U SPL, Dup |
| 06/07/00 | 0.075 | U | 0.075 | U | 0.075 | U | 0.075 | U | 0.2 | U |
| 10/11/00 | 0.075 | U | 0.075 | U | 0.075 | U | 0.075 | U | 0.2 | U |
| 05/08/01 | 0.075 | U | 0.075 | U | 0.075 | U | 0.075 | U | 0.2 | U, CSL |
| 10/16/01 | 0.19 | U | 0.19 | U | 0.13 | U | 0.1 | U | 0.13 | U |
| 04/22/02 | 0.18 | U | 0.195 | U | 0.16 | U | 0.577 | J | 0.18 | U |
| 10/22/02 | 0.18 | U | 0.195 | U | 0.16 | U | 0.21 | U | 0.18 | U |
| 04/13/05 | 0.25 | U | 0.2 | U | 0.225 | U | 0.21 | U | 0.25 | U |
| 07/12/05 | 0.25 | U | 0.25 | U | 0.225 | U | 0.21 | U | 0.25 | U |

**Gannett Fleming**

ANALYTICAL RESULTS FROM PLUME 1/2 MONITORING WELLS

| Date | MW-23A | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1, 1 - DCA | | 1, 1 - DCE | | PCE | | 1, 1, 1 - TCA | | TCE | |
| MCL/ES/PAL Limitations | None/850/85 | | 7/7/0.7 | | 5/5/0.5 | | 200/200/40 | | 5/5/0.5 | |
| 10/88 | 1.5 | | 0.145 | U | 0.17 | U | 2.3 | | 0.97 | |
| 5/90 | 5 | | 1 | | 0.3 | | 49 | D | 2 | |
| 4/91 | 5 | | 0.9 | | 0.4 | | 43 | | 1.5 | U |
| 02/08/94 | 2 | | 0.3 | | 0.1 | ND | 16 | | 1.0 | |
| 03/28/94 | 2 | | 0.1 | ND | 0.1 | ND | 18 | | 1.5 | |
| 06/06/94 | 2.5 | | 0.1 | ND | 0.1 | ND | 37 | | 2.7 | |
| 08/23/94 | 1.8 | | 0.1 | ND | 0.1 | ND | 30 | | 2.5 | |
| 10/27/94 | 2.3 | | 0.1 | ND | 0.1 | ND | 37 | | 4.4 | |
| 01/19/95 | 2.7 | | 0.1 | ND | 0.1 | ND | 30 | | 5.2 | |
| 04/19/95 | 1.9 | | 0.1 | ND | 0.1 | ND | 24 | | 6.6 | |
| 07/18/95 | 0.1 | ND | 0.1 | ND | 0.1 | ND | 14 | | 5.7 | |
| 10/09/95 | 0.1 | ND | 0.1 | ND | 0.1 | ND | 7.6 | | 4.4 | |
| 01/08/96 | 0.1 | ND | 0.1 | ND | 0.1 | ND | 4.5 | | 5.5 | |
| 04/17/96 | 0.36 | | 0.1 | ND | 0.35 | | 3.4 | | 4.8 | |
| 07/09/96 | 0.1 | ND | 0.1 | ND | 0.1 | ND | 2.8 | | 0.18 | ND |
| 10/02/96 | 0.1 | ND | 0.1 | ND | 0.43 | | 2.4 | | 3.9 | |
| 04/01/97 | 0.1 | ND | 0.1 | ND | 0.1 | ND | 2.06 | | 4.46 | |
| 05/20/97 | 0.1 | ND | 2.1 | | 0.1 | ND | 1.31 | | 2.73 | |
| 07/22/97 | 0.1 | ND | 0.1 | ND | 0.1 | ND | 1.47 | | 2.44 | |
| 10/23/97 | 0.2 | U | 0.25 | U | 0.3 | U | 1.38 | | 3.53 | |
| 01/28/98 | 0.1 | U | 0.1 | U | 0.1 | U | 1.26 | | 3.43 | |
| 04/22/98 | 0.1 | U | 0.1 | U | 0.1 | U | 0.965 | | 3.19 | |
| 07/20/98 | 0.1 | U | 0.1 | U | 0.245 | | 0.931 | | 2.9 | |
| 10/28/98 | 0.1 | U | 0.1 | U | 0.1 | U | 0.815 | | 2.71 | |
| 01/18/99 | 0.1 | U | 0.1 | U | 0.219 | J | 0.742 | J | 2.54 | |
| 04/13/99 | 0.1 | U | 0.1 | U | 0.259 | J | 0.89 | | 2.7 | |
| 07/28/99 | 0.05 | U | 0.075 | U | 0.181 | J | 0.745 | | 2.34 | |
| 10/06/99 | 0.097 | J | 0.075 | U | 0.164 | J | 0.958 | | 3.46 | |
| 02/01/00 | 0.075 | U | 0.075 | U | 0.152 | J, CSL | 0.531 | | 2.01 | |
| 06/06/00 | 0.075 | U | 0.075 | U, CSH | 0.075 | U | 0.521 | | 1.93 | |
| 07/18/00 | 0.075 | U | 0.075 | U | 0.075 | U | 0.395 | J | 1.48 | |
| 01/24/01 | 0.075 | U, SPH | 0.075 | U | 0.075 | U | 0.2 | J, SPH | 2.18 | |
| 05/09/01 | 0.075 | U | 0.075 | U | 0.075 | U | 0.075 | U | 0.2 | U |
| 07/17/01 | 0.19 | U | 0.19 | U | 0.13 | U | 0.551 | J | 2.28 | |
| 10/18/01 | 0.19 | U | 0.19 | U | 0.13 | U | 0.1 | U | 1.9 | |
| 01/09/02 | 0.19 | U | 0.19 | U | 0.13 | U | 0.1 | U | 1.81 | |
| 04/22/02 | 0.18 | U | 0.195 | U | 0.16 | U | 0.501 | J | 2.15 | |
| 07/09/02 | 0.18 | U | 0.195 | U | 0.16 | U | 0.502 | J | 2.16 | |
| 10/22/02 | 0.18 | U | 0.195 | U | 0.16 | U | 0.21 | U | 1.82 | Dup |
| 01/07/03 | 0.18 | U | 0.195 | U | 0.16 | U | 0.21 | U | 1.54 | |
| 04/09/03 | 0.18 | U | 0.195 | U | 0.16 | U | 0.21 | U | 1.78 | |
| 07/22/03 | 0.18 | U | 0.195 | U | 0.16 | U | 0.21 | U | 1.74 | |
| 10/07/03 | 0.18 | U | 0.195 | U | 0.16 | U | 0.21 | U | 1.83 | |
| 02/24/04 | 0.25 | U | 0.25 | U | 0.225 | U | 0.21 | U | 1.56 | J |
| 03/16/04 | 0.25 | U | 0.25 | U | 0.225 | U | 0.21 | U | 1.51 | J |
| 04/13/04 | 0.25 | U | 0.25 | U | 0.225 | U | 0.21 | U | 2.78 | J |
| 05/24/04 | 0.25 | U | 0.25 | U | 0.225 | U | 0.21 | U | 1.64 | J |

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ANALYTICAL RESULTS FROM PLUME 1/2 MONITORING WELLS

| Date | MW-23A | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1, 1 - DCA | | 1, 1 - DCE | | PCE | | 1, 1, 1 - TCA | | TCE | |
| MCL/ES/PAL Limitations | None/850/85 | | 7/7/0.7 | | 5/5/0.5 | | 200/200/40 | | 5/5/0.5 | |
| 06/22/04 | 0.25 | U | 0.25 | U | 0.225 | U | 0.21 | U | **1.47** | J |
| 07/14/04 | 0.25 | U | 0.25 | U | 0.225 | U | 0.21 | U | **1.84** | |
| 10/19/04 | 0.25 | U | 0.25 | U | 0.225 | U | 0.21 | U | **1.71** | |
| 01/18/05 | 0.25 | U | 0.25 | U | 0.225 | U | 0.21 | U | **1.60** | J |
| 04/12/05 | 0.25 | U | 0.25 | U | 0.225 | U | 0.21 | U | **1.75** | |
| 07/12/05 | 0.25 | U | 0.25 | U | 0.225 | U | 0.21 | U | **1.56** | J |
| 10/11/05 | 0.25 | U | 0.25 | U | 0.225 | U | 0.21 | U | **1.51** | J |
| 01/18/06 | 0.25 | U | 0.25 | U | 0.225 | U | 0.21 | U | **1.73** | |
| 04/18/06 | 0.25 | U | 0.25 | U | 0.225 | U | 0.625 | J | **2.13** | |
| 07/25/06 | 0.25 | U | 0.25 | U | 0.355 | U | 0.48 | J | **1.78** | |
| 10/16/06 | 0.075 | U | 0.075 | U | 0.05 | U | 0.10 | U | **2.19** | J |

**Gannett Fleming**

ANALYTICAL RESULTS FROM PLUME 1/2 MONITORING WELLS

| Date | MW-23B | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1, 1 - DCA | | 1, 1 - DCE | | PCE | | 1, 1, 1 - TCA | | TCE | |
| MCL/ES/PAL Limitations | None/850/85 | | 7/7/0.7 | | 5/5/0.5 | | 200/200/40 | | 5/5/0.5 | |
| 10/01/88 | 6.4 | | 0.145 | U | 0.145 | U | 9.5 | | 1.5 | |
| 05/01/90 | 8 | | 2 | | 0.6 | | 71 | E,R | 3 | |
| 04/01/91 | 5 | | 0.8 | | 0.4 | | 40 | | 1.5 | U |
| 02/08/94 | 5 | | 0.7 | | 0.4 | | 16 | | 2 | |
| 03/28/94 | 3.5 | | 0.1 | ND | 0.1 | ND | 28 | | 1.8 | |
| 06/06/94 | 1.9 | | 0.1 | ND | 0.1 | ND | 17 | | 1.1 | |
| 08/23/94 | 4.9 | | 1.6 | | 0.1 | ND | 59 | | 5.6 | |
| 10/27/94 | 3.8 | | 1.1 | | 0.1 | ND | 54 | | 6.2 | |
| 01/19/95 | 2.5 | | 0.1 | ND | 0.1 | ND | 27 | | 4.3 | |
| 04/19/95 | 0.1 | | 1.1 | | 0.1 | ND | 29 | | 8 | |
| 07/18/95 | 0.1 | ND | 0.1 | ND | 0.1 | ND | 15 | | 8.2 | |
| 10/09/95 | 0.1 | ND | 0.1 | ND | 0.1 | ND | 3.1 | | 1.5 | |
| 01/08/96 | 0.1 | ND | 0.1 | ND | 0.1 | ND | 4.3 | | 6.8 | |
| 04/17/96 | 0.31 | | 0.1 | ND | 0.1 | ND | 2.1 | | 2.9 | |
| 07/09/96 | 0.1 | ND | 0.1 | ND | 0.1 | ND | 2.4 | | 3.2 | |
| 10/02/96 | 0.1 | ND | 0.1 | ND | 0.1 | ND | 2.2 | | 5.5 | |
| 04/01/97 | 0.1 | ND | 0.1 | ND | 0.1 | ND | 0.445 | | 1.96 | |
| 05/20/97 | 0.1 | ND | 0.1 | ND | 0.1 | ND | 0.34 | | 0.86 | |
| 07/22/97 | 0.1 | ND | 0.1 | ND | 0.1 | ND | 1.02 | | 2.19 | |
| 10/23/97 | 0.2 | U | 0.25 | U | 0.3 | U | 1.47 | | 4.07 | |
| 01/28/98 | 0.1 | U | 0.1 | U | 0.1 | U | 0.545 | | 1.34 | |
| 04/22/98 | 0.1 | U | 0.1 | U | 0.1 | U | 1.19 | | 3.95 | |
| 07/20/98 | 0.1 | U | 0.1 | U | 0.1 | U | 0.652 | | 1.7 | |
| 10/28/98 | 0.1 | U | 0.1 | U | 0.282 | | 1.06 | | 3.27 | |
| 01/18/99 | 0.1 | U | 0.1 | U | 0.1 | U | 0.233 | J | 0.752 | |
| 04/13/99 | 0.271 | J | 0.1 | U | 0.361 | J | 1.3 | | 3.78 | |
| 07/28/99 | 0.229 | J | 0.075 | U | 0.218 | J | 1.12 | | 3.33 | |
| 10/06/99 | 0.306 | J | 0.075 | U | 0.201 | J | 1.28 | | 4.06 | |
| 02/01/00 | 0.075 | U | 0.075 | U | 0.186 | J | 0.559 | | 2.08 | |
| 06/06/00 | 0.075 | U | 0.075 | U, SPH | 0.075 | J, CSL | 0.446 | J | 1.78 | |
| 07/18/00 | 0.188 | J | 0.075 | U | 0.156 | J | 0.765 | | 2.55 | |
| 01/24/01 | 0.075 | U, SPH | 0.075 | U | 0.075 | U | 0.426 | J, SPH | 2.65 | |
| 05/09/01 | 0.075 | U | 0.075 | U | 0.075 | U | 0.075 | U | 0.459 | J |
| 07/17/01 | 0.19 | U | 0.19 | U | 0.13 | U | 0.734 | | 3.06 | |
| 10/18/01 | 0.19 | U | 0.19 | U | 0.13 | U | 0.294 | J | 2.75 | |
| 01/09/02 | 0.19 | U | 0.19 | U | 0.13 | U | 0.1 | U | 0.427 | J |
| 04/22/02 | 0.18 | U | 0.195 | U | 0.16 | U | 0.841 | J | 3.16 | |
| 07/09/02 | 0.18 | U | 0.195 | U | 0.16 | U | 0.768 | J | 3.28 | |
| 10/22/02 | 0.18 | U | 0.195 | U | 0.16 | U | 0.651 | J, Dup | 2.92 | Dup |
| 01/07/03 | 0.18 | U | 0.195 | U | 0.16 | U | 0.435 | J | 2.54 | |
| 04/09/03 | 0.18 | U | 0.195 | U | 0.16 | U | 0.21 | U | 2.69 | |
| 07/22/03 | 0.18 | U | 0.195 | U | 0.16 | U | 0.21 | U | 1.55 | |
| 10/07/03 | 0.18 | U | 0.195 | U | 0.16 | U | 0.661 | J | 3.04 | |
| 02/24/04 | 0.25 | U | 0.25 | U | 0.225 | U | 0.628 | J | 2.63 | |
| 03/16/04 | 0.25 | U | 0.25 | U | 0.225 | U | 0.53 | J | 2.94 | |
| 04/13/04 | 0.25 | U | 0.25 | U | 0.225 | U | 0.53 | J | 1.52 | J |
| 05/24/04 | 0.25 | U | 0.25 | U | 0.225 | U | 0.618 | J | 3.13 | |
| 06/22/04 | 0.25 | U | 0.25 | U | 0.225 | U | 0.531 | J | 2.88 | |

**Gannett Fleming**

ANALYTICAL RESULTS FROM PLUME 1/2 MONITORING WELLS

| Date | MW-23B | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1, 1 - DCA | | 1, 1 - DCE | | PCE | | 1, 1, 1 - TCA | | TCE | |
| MCL/ES/PAL Limitations | None/850/85 | | 7/7/0.7 | | 5/5/0.5 | | 200/200/40 | | 5/5/0.5 | |
| 07/14/04 | 0.25 | U | 0.25 | U | 0.225 | U | 0.746 | J | **3.49** | |
| 10/19/04 | 0.25 | U | 0.25 | U | 0.225 | U | 0.61 | J | **3.10** | |
| 01/18/05 | 0.25 | U | 0.25 | U | 0.225 | U | 0.21 | U | **2.90** | |
| 04/12/05 | 0.25 | U | 0.25 | U | 0.225 | U | 0.461 | J | **2.90** | |
| 07/12/05 | 0.25 | U | 0.25 | U | 0.225 | U | 0.464 | J | **2.71** | |
| 10/11/05 | 0.25 | U | 0.25 | U | 0.225 | U | 0.463 | J | **2.53** | |
| 01/18/06 | 0.25 | U | 0.25 | U | 0.225 | U | 0.21 | U | **2.89** | |
| 04/18/06 | 0.25 | U | 0.25 | U | 0.225 | U | 0.917 | J | **3.09** | |
| 07/25/06 | 0.25 | U | 0.25 | U | 0.355 | U | 0.65 | J | **2.52** | |
| 10/16/06 | 0.075 | U | 0.075 | U | 0.16 | J | 0.10 | U | **3.25** | |

**Gannett Fleming**

ANALYTICAL RESULTS FROM PLUME 1/2 MONITORING WELLS

| Date | MW-33A | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1, 1 - DCA | | 1, 1 - DCE | | PCE | | 1, 1, 1 - TCA | | TCE | |
| MCL/ES/PAL Limitations | None/850/85 | | 7/7/0.7 | | 5/5/0.5 | | 200/200/40 | | 5/5/0.5 | |
| 7/89 | 0.1 | U | 0.1 | U | 0.1 | U | 0.7 | | 0.1 | U |
| 5/90 | 0.6 | | 0.7 | | 0.1 | U | 7 | | 0.1 | U |
| 04/16/99 | 0.1 | U | 0.1 | U | 0.1 | U | 0.366 | J | 0.18 | U |
| 10/07/99 | 0.075 | U | 0.075 | U | 0.075 | U | 0.359 | J | 0.05 | U |
| 05/23/00 | 0.075 | U | 0.075 | U, CSH | 0.075 | U | 0.152 | J | 0.2 | U |
| 10/13/00 | 0.075 | U | 0.075 | U | 0.075 | U | 0.294 | J | 0.05 | U |
| 05/09/01 | 0.075 | U | 0.075 | U | 0.075 | U | 0.075 | U | 0.459 | J |
| 10/18/01 | 0.19 | U | 0.19 | U | 0.13 | U | 0.207 | J | 0.13 | U |
| 04/22/02 | 0.18 | U | 0.195 | U | 0.16 | U | 0.21 | U | 0.18 | U |
| 10/23/02 | 0.18 | U | 0.195 | U | 0.16 | U | 0.21 | U | 0.18 | U |
| 07/23/03 | 0.18 | U | 0.195 | U | 0.16 | U | 0.21 | U | 0.18 | U |
| 10/18/06 | 0.075 | U | 0.075 | U | 0.05 | U | 0.10 | U | 0.10 | U |

**Gannett Fleming**

TABLE 3

ANALYTICAL RESULTS FROM PLUME 1/2 MONITORING WELLS

| Date | MW-34A | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1, 1 - DCA | | 1, 1 - DCE | | PCE | | 1, 1, 1 - TCA | | TCE | |
| MCL/ES/PAL Limitations | None/850/85 | | 7/7/0.7 | | 5/5/0.5 | | 200/200/40 | | 5/5/0.5 | |
| 6/90 | 2 | | 0.1 | J | 0.6 | | 6 | | 49 | |
| 7/90 | 3 | | 0.15 | U | 0.7 | | 7 | | 61 | |
| 4/91 | 5 | | 0.15 | U | 1 | | 8 | | 30 | |
| 12/91 | 7 | | 0.15 | U | 1 | | 10 | | 51 | E.J |
| 7/92 | 6 | | 0.15 | U | 2 | | 10 | | 49 | |
| 02/08/94 | 4 | | 0.04 | | 0.9 | | 5 | | 8 | |
| 03/28/94 | 3.3 | | 0.1 | ND | 0.1 | ND | 4.9 | | 11 | |
| 06/06/94 | 4.5 | | 0.1 | ND | 0.1 | ND | 5.3 | | 12 | |
| 08/23/94 | 3.3 | | 0.1 | ND | 0.1 | ND | 5.6 | | 31 | |
| 10/27/94 | 2.8 | | 0.1 | ND | 0.1 | ND | 4.4 | | 12 | |
| 01/19/95 | 2.5 | | 0.1 | ND | 0.1 | ND | 4.2 | | 20 | |
| 04/19/95 | 3.5 | | 0.1 | ND | 1.2 | | 7.1 | | 40 | |
| 07/18/95 | 4.2 | | 0.1 | ND | 1.1 | | 9 | | 43 | |
| 10/09/95 | 5.6 | | 0.1 | ND | 1.1 | | 9.6 | | 47 | |
| 01/08/96 | 4.7 | | 0.1 | ND | 1.7 | | 9 | | 61 | |
| 04/17/96 | 12.3 | | 0.1 | ND | 3.9 | | 21 | | 150 | |
| 07/09/96 | 10 | | 0.1 | ND | 2.1 | | 15 | | 49 | |
| 10/02/96 | 8.6 | | 0.1 | ND | 1.8 | | 15 | | 75 | |
| 04/01/97 | 15.5 | | 0.1 | ND | 1.31 | | 22.5 | | 35.2 | |
| 05/21/97 | 0.1 | ND | 13.2 | | 0.94 | | 16.2 | | 16.5 | |
| 07/21/97 | 15.8 | | 0.1 | ND | 1.83 | | 21.8 | | 45.5 | |
| 10/22/97 | 11.7 | | 0.25 | U | 1.35 | | 15 | | 46 | |
| 01/27/98 | 10.2 | | 0.1 | U | 1.21 | | 13.3 | | 39.7 | |
| 04/21/98 | 15.4 | | 0.1 | U | 1.01 | | 17.9 | | 24.1 | |
| 07/21/98 | 13 | | 0.1 | U | 1.33 | | 14.5 | | 15.1 | |
| 10/27/98 | 7.23 | | 0.1 | U | 1.22 | | 8.44 | | 17 | |
| 01/18/99 | 3.48 | | 0.1 | U | 0.1 | U | 4.03 | | 7.59 | |
| 04/12/99 | 8.17 | | 0.1 | U | 1.05 | | 7.8 | | 5.94 | CSH |
| 07/27/99 | 5.58 | | 0.075 | U | 0.899 | | 5.66 | | 7.99 | |
| 10/06/99 | 4.2 | | 0.075 | U | 0.786 | | 5.28 | | 13.9 | Dup, SPL |
| 02/02/00 | | (1) | | (1) | | (1) | | (1) | | (1) |
| 06/07/00 | | (1) | | (1) | | (1) | | (1) | | (1) |
| 07/18/00 | | (1) | | (1) | | (1) | | (1) | | (1) |
| 10/11/00 | | (1) | | (1) | | (1) | | (1) | | (1) |
| 02/07/02 | 0.406 | J | 0.19 | U | 0.85 | | 0.733 | J | 42.1 | |
| 02/21/02 | 0.19 | U | 0.19 | U | 0.931 | | 0.99 | | 42.4 | |
| 04/22/02 | 0.627 | J | 0.195 | U, SPL | 1.24 | SPL | 1.9 | | 47.3 | |
| 07/10/02 | 1.76 | | 0.195 | U | 1.26 | | 2.35 | | 40.3 | |
| 10/22/02 | 0.9 | U | 0.975 | U | 1.63 | | 1.05 | U | 94.7 | |
| 01/07/03 | 0.9 | U | 0.975 | U | 0.8 | U | 1.05 | U | 52.5 | |
| 04/09/03 | 0.18 | U | 0.195 | U | 0.712 | J | 0.21 | U | 23.1 | |
| 07/22/03 | 0.18 | U | 0.195 | U | 0.797 | J | 0.635 | J | 33.8 | |
| 10/07/03 | 1.63 | | 0.195 | U | 1.12 | | 2.19 | | 17 | |
| 04/03/04 | 1.16 | | 0.225 | U | 0.613 | J | 1.51 | | 9.74 | |
| 05/24/04 | 0.5 | U | 0.225 | U | 0.47 | J | 1.68 | | 3.33 | |
| 06/22/04 | 1.34 | J | 0.225 | U | 0.523 | J | 1.58 | | 4.00 | |
| 07/14/04 | 2.04 | | 0.25 | U | 0.625 | J | 2.14 | | 3.75 | |

**Gannett Fleming**

ANALYTICAL RESULTS FROM PLUME 1/2 MONITORING WELLS

| Date | MW-34A | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1, 1 - DCA | | 1, 1 - DCE | | PCE | | 1, 1, 1 - TCA | | TCE | |
| MCL/ES/PAL Limitations | None/850/85 | | 7/7/0.7 | | 5/5/0.5 | | 200/200/40 | | 5/5/0.5 | |
| 6/90 | 2 | | 0.1 | J | **0.6** | | 6 | | **49** | |
| 7/90 | 3 | | 0.15 | U | **0.7** | | 7 | | **61** | |
| 4/91 | 5 | | 0.15 | U | **1** | | 8 | | **30** | |
| 12/91 | 7 | | 0.15 | U | **1** | | 10 | | **51** | E,J |
| 7/92 | 6 | | 0.15 | U | **2** | | 10 | | **49** | |
| 02/08/94 | 4 | | 0.04 | | **0.9** | | 5 | | **8** | |
| 03/28/94 | 3.3 | | 0.1 | ND | 0.1 | ND | 4.9 | | **11** | |
| 06/06/94 | 4.5 | | 0.1 | ND | 0.1 | ND | 5.3 | | **12** | |
| 08/23/94 | 3.3 | | 0.1 | ND | 0.1 | ND | 5.6 | | **31** | |
| 10/27/94 | 2.8 | | 0.1 | ND | 0.1 | ND | 4.4 | | **12** | |
| 01/19/95 | 2.5 | | 0.1 | ND | 0.1 | ND | 4.2 | | **20** | |
| 04/19/95 | 3.5 | | 0.1 | ND | **1.2** | | 7.1 | | **40** | |
| 07/18/95 | 4.2 | | 0.1 | ND | **1.1** | | 9 | | **43** | |
| 10/09/95 | 5.6 | | 0.1 | ND | **1.1** | | 9.6 | | **47** | |
| 01/08/96 | 4.7 | | 0.1 | ND | **1.7** | | 9 | | **61** | |
| 04/17/96 | 12.3 | | 0.1 | ND | **3.9** | | 21 | | **150** | |
| 07/09/96 | 10 | | 0.1 | ND | **2.1** | | 15 | | **49** | |
| 10/02/96 | 8.6 | | 0.1 | ND | **1.8** | | 15 | | **75** | |
| 04/01/97 | 15.5 | | 0.1 | ND | **1.31** | | 22.5 | | **35.2** | |
| 05/21/97 | 0.1 | ND | **13.2** | | **0.94** | | 16.2 | | **16.5** | |
| 07/21/97 | 15.8 | | 0.1 | ND | **1.83** | | 21.8 | | **45.5** | |
| 10/22/97 | 11.7 | | 0.25 | U | **1.35** | | 15 | | **46** | |
| 01/27/98 | 10.2 | | 0.1 | U | **1.21** | | 13.3 | | **39.7** | |
| 04/21/98 | 15.4 | | 0.1 | U | **1.01** | | 17.9 | | **24.1** | |
| 07/21/98 | 13 | | 0.1 | U | **1.33** | | 14.5 | | **15.1** | |
| 10/27/98 | 7.23 | | 0.1 | U | **1.22** | | 8.44 | | **17** | |
| 01/18/99 | 3.48 | | 0.1 | U | 0.1 | U | 4.03 | | **7.59** | |
| 04/12/99 | 8.17 | | 0.1 | U | **1.05** | | 7.8 | | **5.94** | **CSH** |
| 07/27/99 | 5.58 | | 0.075 | U | **0.899** | | 5.66 | | **7.99** | |
| 10/06/99 | 4.2 | | 0.075 | U | **0.786** | | 5.28 | | **13.9** | **Dup, SPL** |
| 02/02/00 | | (1) | | (1) | | (1) | | (1) | | (1) |
| 06/07/00 | | (1) | | (1) | | (1) | | (1) | | (1) |
| 07/18/00 | | (1) | | (1) | | (1) | | (1) | | (1) |
| 10/11/00 | | (1) | | (1) | | (1) | | (1) | | (1) |
| 02/07/02 | 0.406 | J | 0.19 | U | **0.85** | | 0.733 | J | **42.1** | |
| 02/21/02 | 0.19 | U | 0.19 | U | **0.931** | | 0.99 | | **42.4** | |
| 04/22/02 | 0.627 | J | 0.195 | U, SPL | **1.24** | **SPL** | 1.9 | | **47.3** | |
| 07/10/02 | 1.76 | | 0.195 | U | **1.26** | | 2.35 | | **40.3** | |
| 10/22/02 | 0.9 | U | 0.975 | U | **1.63** | | 1.05 | U | **94.7** | |
| 01/07/03 | 0.9 | U | 0.975 | U | **0.8** | U | 1.05 | U | **52.5** | |
| 04/09/03 | 0.18 | U | 0.195 | U | **0.712** | **J** | 0.21 | U | **23.1** | |
| 07/22/03 | 0.18 | U | 0.195 | U | **0.797** | **J** | 0.635 | J | **33.8** | |
| 10/07/03 | 1.63 | | 0.195 | U | **1.12** | | 2.19 | | **17** | |
| 04/03/04 | 1.16 | | 0.225 | U | **0.613** | J | 1.51 | | **9.74** | |
| 05/24/04 | 0.5 | U | 0.225 | U | 0.47 | J | 1.68 | | **3.33** | |
| 06/22/04 | 1.34 | J | 0.225 | U | **0.523** | J | 1.58 | | **4.00** | |
| 07/14/04 | 2.04 | | 0.25 | U | **0.625** | J | 2.14 | | **3.75** | |

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ANALYTICAL RESULTS FROM PLUME 1/2 MONITORING WELLS

| Date | MW-34A | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1, 1 - DCA | | 1, 1 - DCE | | PCE | | 1, 1, 1 - TCA | | TCE | |
| MCL/ES/PAL Limitations | None/850/85 | | 7/7/0.7 | | 5/5/0.5 | | 200/200/40 | | 5/5/0.5 | |
| 10/19/04 | 1.18 | J | 0.25 | U | **0.523** | J | 1.11 | J | **4.68** | |
| 01/18/05 | 1.77 | | 0.25 | U | **0.557** | J | 1.16 | J | **2.19** | |
| 04/11/05 | 2.92 | | 0.25 | U | **0.813** | J | 1.85 | | **1.11** | J |
| 07/12/05 | 3.70 | | 0.25 | U | **0.915** | J | 2.11 | | **1.07** | J |
| 10/10/05 | 2.29 | | 0.25 | U | **0.607** | J | 1.04 | J | **0.648** | J |
| 01/18/06 | 1.93 | | 0.25 | U | **0.643** | J | 0.89 | J | 0.25 | U |
| 04/17/06 | | (1) | | (1) | | (1) | | (1) | | (1) |
| 07/25/06 | | (1) | | (1) | | (1) | | (1) | | (1) |
| 10/16/06 | | (1) | | (1) | | (1) | | (1) | | (1) |

**Gannett Fleming**

ANALYTICAL RESULTS FROM PLUME 1/2 MONITORING WELLS

| Date | MW-34B | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1, 1 - DCA | | 1, 1 - DCE | | PCE | | 1, 1, 1 - TCA | | TCE | |
| MCL/ES/PAL Limitations | None/850/85 | | 7/7/0.7 | | 5/5/0.5 | | 200/200/40 | | 5/5/0.5 | |
| 6/90 | 0.1 | U | 0.1 | U | 0.1 | U | 0.1 | U | 0.1 | U |
| 7/90 | 0.1 | U | 0.1 | U | 0.1 | U | 0.3 | | 0.1 | U |
| 4/91 | 1 | | 0.15 | U | 0.3 | | 1 | | 0.1 | |
| 12/91 | 1 | | 0.15 | U | 0.15 | U | 0.8 | J | **0.9** | |
| 7/92 | 1 | | 0.15 | U | 1 | | 2 | | 0.15 | U |
| 02/08/94 | 1 | | 0.1 | ND | 0.2 | | 1 | | 0.05 | |
| 03/28/94 | 8 | | 0.1 | ND | 0.1 | ND | 1.8 | | **1.2** | |
| 06/06/94 | 1.9 | | 0.1 | ND | 0.1 | ND | 2.1 | | **1** | |
| 08/23/94 | 1.4 | | 0.1 | ND | 0.1 | ND | 1.8 | | **1.2** | |
| 10/27/94 | 1.2 | | 0.1 | ND | 0.1 | ND | 1.7 | | 0.18 | ND |
| 01/19/95 | 1.3 | | 0.1 | ND | 0.1 | ND | 1.6 | | 0.18 | ND |
| 04/19/95 | 1.1 | | 0.1 | ND | 0.1 | ND | 2 | | **2.9** | |
| 07/18/95 | 0.1 | ND | 0.1 | ND | 0.1 | ND | 0.1 | ND | 0.18 | ND |
| 10/09/95 | 0.1 | ND | 0.1 | ND | 0.1 | ND | 0.1 | ND | 0.18 | ND |
| 01/08/96 | 1.4 | | 0.1 | ND | 0.1 | ND | 1.6 | | 0.18 | ND |
| 04/17/96 | 1.6 | | 0.1 | ND | 0.32 | | 1.9 | | **0.63** | |
| 07/09/96 | 1.2 | | 0.1 | ND | **2.3** | | 1.6 | | 0.44 | |
| 10/02/96 | 1.3 | | 0.1 | ND | 0.36 | | 1.7 | | 0.48 | |
| 04/01/97 | 0.898 | | 0.1 | ND | 0.1 | ND | 1.24 | | 0.367 | |
| 05/21/97 | 0.1 | ND | **0.94** | | 0.1 | ND | 1.2 | | 0.28 | |
| 07/21/97 | 1.04 | | 0.1 | ND | 0.1 | ND | 1.57 | | **1.02** | |
| 10/22/97 | 1.17 | | 0.25 | U | 0.3 | U | 1.5 | | 0.49 | |
| 01/27/98 | 1.91 | | 0.1 | U | 0.26 | | 2.37 | | **0.895** | |
| 04/21/98 | 1.1 | | 0.1 | U | 0.1 | U | 1.5 | | 0.18 | U |
| 07/21/98 | 0.781 | | 0.1 | U | 0.21 | | 0.958 | | 0.401 | |
| 10/27/98 | 0.942 | | 0.1 | U | 0.1 | U | 0.959 | | 0.451 | |
| 01/18/99 | 0.697 | J | 0.1 | U | 0.1 | U | 0.74 | J | 0.18 | U |
| 04/12/99 | 0.616 | J | 0.1 | U | 0.242 | J | 0.592 | J | 0.18 | U |
| 07/27/99 | 0.318 | J | 0.075 | U | 0.075 | U | 0.354 | J | 0.2 | U |
| 10/06/99 | 0.392 | J | 0.075 | U | 0.075 | U | 0.437 | J | 0.49 | Dup, SPL |
| 02/02/00 | 0.075 | U | 0.075 | U | 0.075 | U | 0.075 | U | 0.2 | U, CSH, Dup |
| 06/07/00 | 0.292 | J | 0.075 | U | 0.075 | U | 0.214 | J | 0.451 | J |
| 07/18/00 | 0.161 | J | 0.075 | U | 0.075 | U | 0.075 | U | 0.2 | U |
| 10/11/00 | 0.269 | J | 0.075 | U | 0.181 | J | 0.252 | J | **4.99** | |
| 01/24/01 | 0.156 | J, SPH | 0.075 | U | 0.075 | U | 0.075 | U, SPH | **0.951** | **J** |
| 05/08/01 | 0.263 | J | 0.075 | U | 0.075 | U | 0.248 | J | 0.2 | U |
| 07/17/01 | 0.19 | U | 0.19 | U | 0.13 | U | 0.287 | J | 0.369 | J |
| 10/16/01 | 0.19 | U | 0.19 | U | 0.13 | U | 0.1 | U | 0.13 | U |
| 01/09/02 | 0.19 | U | 0.19 | U | 0.13 | U | 0.1 | U | 0.13 | U |
| 04/22/02 | 0.18 | U | 0.195 | U | 0.16 | U | 0.21 | U | 0.18 | U |
| 07/09/02 | 0.18 | U | 0.195 | U | 0.16 | U | 0.21 | U | 0.18 | U |
| 10/22/02 | 0.18 | U | 0.195 | U | 0.16 | U | 0.21 | U | 0.18 | U |
| 01/07/03 | 0.18 | U | 0.195 | U | 0.16 | U | 0.21 | U | 0.18 | U |
| 02/24/04 | 0.25 | U | 0.25 | U | 0.225 | U | 0.21 | U | 0.25 | U |
| 03/16/04 | 0.25 | U | 0.25 | U | 0.225 | U | 0.21 | U | 0.25 | U |
| 05/24/04 | 0.25 | U | 0.25 | U | 0.225 | U | 0.21 | U | 0.25 | U |

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ANALYTICAL RESULTS FROM PLUME 1/2 MONITORING WELLS

| Date | MW-34B | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1, 1 - DCA | | 1, 1 - DCE | | PCE | | 1, 1, 1 - TCA | | TCE | |
| MCL/ES/PAL Limitations | None/850/85 | | 7/7/0.7 | | 5/5/0.5 | | 200/200/40 | | 5/5/0.5 | |
| 06/22/04 | 0.25 | U | 0.25 | U | 0.225 | U | 0.21 | U | 0.25 | U |
| 04/17/06 | 0.25 | U | 0.25 | U | 0.225 | U | 0.21 | U | 0.25 | U |
| 10/17/06 | 0.075 | U | 0.075 | U | 0.05 | U | 0.10 | U | 0.10 | U |

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ANALYTICAL RESULTS FROM PLUME 1/2 MONITORING WELLS

| Date | MW-34C | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1, 1 - DCA | | 1, 1 - DCE | | PCE | | 1, 1, 1 - TCA | | TCE | |
| MCL/ES/PAL Limitations | None/850/85 | | 7/7/0.7 | | 5/5/0.5 | | 200/200/40 | | 5/5/0.5 | |
| 02/02/00 | 0.075 | U | 0.075 | U | 0.075 | U | 0.075 | U | 0.2 | U, CSH, Dup |
| 06/07/00 | 0.075 | U | 0.075 | U | 0.075 | U | 0.075 | U | 0.2 | U |
| 07/18/00 | 0.075 | U | 0.075 | U | 0.075 | U | 0.075 | U | 0.2 | U |
| 10/11/00 | 0.075 | U | 0.075 | U | 0.075 | U | 0.075 | U | 0.2 | U |
| 01/24/01 | 0.075 | U, SPH | 0.075 | U | 0.075 | U | 0.075 | U, SPH | 0.2 | U |
| 05/08/01 | 0.075 | U | 0.075 | U | 0.075 | U | 0.075 | U | 0.2 | U |
| 07/17/01 | 0.19 | U | 0.19 | U | 0.13 | U | 0.1 | U | 0.13 | U |
| 10/16/01 | 0.19 | U | 0.19 | U | 0.13 | U | 0.1 | U | 0.13 | U |
| 01/09/02 | 0.19 | U | 0.19 | U | 0.13 | U | 0.1 | U | 0.384 | J |
| 04/22/02 | 0.18 | U | 0.195 | U | 0.16 | U | 0.21 | U | 0.18 | U |
| 07/09/02 | 0.18 | U | 0.195 | U | 0.16 | U | 0.21 | U | 0.18 | U |
| 10/22/02 | 0.18 | U | 0.195 | U | 0.16 | U | 0.21 | U | 0.18 | U |
| 01/07/03 | 0.18 | U | 0.195 | U | 0.16 | U | 0.21 | U | 0.18 | U |

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ANALYTICAL RESULTS FROM PLUME 1/2 MONITORING WELLS

| Date | MW-38A | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1,1 - DCA | | 1,1 - DCE | | PCE | | 1,1,1 - TCA | | TCE | |
| MCL/ES/PAL Limitations | None/850/85 | | 7/7/0.7 | | 5/5/0.5 | | 200/200/40 | | 5/5/0.5 | |
| 04/01/91 | 4.0 | | **2.0** | | **0.5** | | **52** | | **7.0** | B, J |
| 12/01/91 | 3.0 | | **2.0** | | 0.3 | | **39** | | **5.0** | |
| 07/12/05 | 0.25 | U | 0.25 | U | 0.225 | U | 0.21 | U | **1.74** | |
| 10/11/05 | 0.25 | U | 0.25 | U | 0.225 | U | 0.21 | U | **1.62** | J |
| 07/25/06 | 0.25 | U | 0.25 | U | 0.355 | U | 0.21 | U | **1.33** | J |
| 10/16/06 | 0.075 | U | 0.075 | U | 0.11 | J | 0.10 | U | **1.35** | |

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ANALYTICAL RESULTS FROM PLUME 1/2 MONITORING WELLS

| Date | MW-38B | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1, 1 - DCA | | 1, 1 - DCE | | PCE | | 1, 1, 1 - TCA | | TCE | |
| MCL/ES/PAL Limitations | None/850/85 | | 7/7/0.7 | | 5/5/0.5 | | 200/200/40 | | 5/5/0.5 | |
| 04/01/91 | 5.0 | | **3.0** | | **1.0** | | **70** | | **11.0** | B, J |
| 12/01/91 | 4.0 | | **2.0** | | **0.9** | | **48** | | **10.0** | |
| 07/12/05 | 0.25 | U | 0.25 | U | 0.225 | U | 0.872 | J | **5.03** | |
| 10/11/05 | 0.25 | U | 0.25 | U | 0.225 | U | 0.957 | J | **4.07** | |
| 07/25/06 | 0.25 | U | 0.25 | U | 0.355 | U | 0.94 | J | **3.91** | |
| 10/18/06 | 0.16 | J | 0.075 | U | 0.34 | J | 0.10 | U | **5.40** | |

**Gannett Fleming**

ANALYTICAL RESULTS FROM PLUME 1/2 MONITORING WELLS

| Date | MW-38C | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1, 1 - DCA | | 1, 1 - DCE | | PCE | | 1, 1, 1 - TCA | | TCE | |
| MCL/ES/PAL Limitations | None/850/85 | | 7/7/0.7 | | 5/5/0.5 | | 200/200/40 | | 5/5/0.5 | |
| 04/01/91 | 0.6 | | 0.15 | U | 0.1 | B, J | 6.0 | | 1.5 | U |
| 12/01/91 | 0.1 | U | 0.15 | U | 0.15 | U | 14 | | 4.0 | |
| 07/12/05 | 0.25 | U | 0.25 | U | 0.225 | U | 0.21 | U | 2.58 | |
| 07/25/06 | 0.25 | U | 0.25 | U | 0.355 | U | 0.49 | J | 1.99 | |
| 10/18/06 | 0.17 | J | 0.075 | U | 0.16 | J | 0.10 | U | 2.59 | |

**Gannett Fleming**

ANALYTICAL RESULTS FROM PLUME 1/2 MONITORING WELLS

| Date | MW-41A | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1, 1 - DCA | | 1, 1 - DCE | | PCE | | 1, 1, 1 - TCA | | TCE | |
| MCL/ES/PAL Limitations | None/850/85 | | 7/7/0.7 | | 5/5/0.5 | | 200/200/40 | | 5/5/0.5 | |
| 10/15/85 | | NA | | NA | | NA | | NA | 5 | |
| 04/22/91 | 2 | | 2 | | 0.5 | | 41 | | 8 | J |
| 12/16/91 | 2 | | 1 | | 0.4 | | 32 | | 8 | |
| 06/15/92 | | NA | | NA | | NA | | NA | 8 | |
| 06/20/92 | | NA | | NA | | NA | | NA | 8 | |
| 07/15/92 | | NA | | NA | | NA | | NA | 8 | |
| 06/15/95 | | NA | | NA | | NA | | NA | 4 | |
| 03/16/98 | | NA | | NA | | NA | | NA | 5.08 | |
| 04/16/99 | 0.461 | CSH, J, MSH | 0.1 | U | 0.373 | J, Dup | 1.79 | | 4.98 | CSH |
| 10/07/99 | 0.685 | Dup | 0.075 | U | 0.321 | J | 2.08 | Dup | 6.76 | |
| 05/23/00 | 0.223 | J | 0.075 | U, CSH | 0.213 | J | 0.938 | | 3.67 | |
| 10/12/00 | 0.363 | J | 0.075 | U | 0.29 | J | 1.6 | | 4.82 | |
| 05/09/01 | 0.075 | U | 0.075 | U | 0.227 | J | 0.794 | | 3.5 | |
| 10/18/01 | 0.19 | U | 0.19 | U | 0.13 | U | 0.36 | J | 3.63 | |
| 04/22/02 | 0.18 | U | 0.195 | U, SPL | 0.16 | U, SPL | 0.483 | J | 3.08 | |
| 10/23/02 | 0.18 | U | 0.195 | U | 0.16 | U | 0.781 | J | 3.66 | |
| 04/09/03 | 0.18 | U | 0.195 | U | 0.16 | U | 0.21 | U | 3.53 | |
| 10/08/03 | 0.18 | U | 0.195 | U | 0.16 | U | 0.618 | J | 3.3 | |
| 04/13/04 | 0.25 | U | 0.25 | U | 0.225 | U | 0.497 | J | 2.98 | |
| 10/19/04 | 0.25 | U | 0.25 | U | 0.225 | U | 0.572 | J | 3.28 | |
| 04/12/05 | 0.25 | U | 0.25 | U | 0.225 | U | 0.428 | J | 3.02 | |
| 10/11/05 | 0.25 | U | 0.25 | U | 0.485 | J | 0.436 | J | 3.52 | |
| 04/18/06 | 0.25 | U | 0.25 | U | 0.225 | U | 0.911 | J | 3.70 | |
| 10/18/06 | 0.075 | U, CSL | 0.075 | U | 0.32 | J | 0.55 | J | 2.92 | |

**Gannett Fleming**

ANALYTICAL RESULTS FROM PLUME 1/2 MONITORING WELLS

| Date | MW-41B | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1, 1 - DCA | | 1, 1 - DCE | | PCE | | 1, 1, 1 - TCA | | TCE | |
| MCL/ES/PAL Limitations | None/850/85 | | 7/7/0.7 | | 5/5/0.5 | | 200/200/40 | | 5/5/0.5 | |
| 10/15/85 | | NA | | NA | | NA | | NA | 5 | |
| 04/22/91 | 1 | | 0.4 | | 0.3 | | 9 | | 7 | J |
| 12/16/91 | 0.9 | | 0.1 | U | 0.2 | J | 5 | | 5 | |
| 06/15/92 | | NA | | NA | | NA | | NA | 5 | |
| 06/20/92 | | NA | | NA | | NA | | NA | 5 | |
| 07/15/92 | | NA | | NA | | NA | | NA | 5 | |
| 06/15/95 | | NA | | NA | | NA | | NA | 4 | |
| 03/16/98 | | NA | | NA | | NA | | NA | 1.89 | |
| 04/16/99 | 1.13 | | 0.1 | U | 0.254 | J | 2 | | 3.79 | CSH |
| 10/07/99 | 1.5 | Dup | 0.075 | U | 0.255 | J | 2.28 | Dup | 5.78 | |
| 05/23/00 | 0.545 | | 0.075 | U, CSH | 0.206 | J | 0.873 | | 2.16 | |
| 10/12/00 | 0.28 | J | 0.075 | U | 0.075 | U | 0.619 | | 1.23 | |
| 05/09/01 | 0.075 | U | 0.075 | U | 0.075 | U | 0.075 | U | 0.555 | J |
| 10/18/01 | 0.19 | U | 0.19 | U | 0.13 | U | 0.586 | J | 3.64 | |
| 04/22/02 | 0.18 | U | 0.195 | U, SPL | 0.16 | U, SPL | 0.488 | J | 2.87 | |
| 10/23/02 | 0.18 | U | 0.195 | U | 0.16 | U | 1.1 | J | 3.64 | |
| 04/09/03 | 0.18 | U | 0.195 | U | 0.16 | U | 0.21 | U | 3.5 | |
| 10/08/03 | 0.18 | U | 0.195 | U | 0.16 | U | 0.748 | J | 3.53 | |
| 04/13/04 | 0.25 | U | 0.25 | U | 0.225 | U | 0.651 | J | 3.57 | |
| 10/19/04 | 0.25 | U | 0.25 | U | 0.225 | U | 0.615 | J | 3.53 | |
| 04/12/05 | 0.25 | U | 0.25 | U | 0.225 | U | 0.21 | U | 3.53 | |
| 10/11/05 | 0.25 | U | 0.25 | U | 0.225 | U | 0.457 | J | 3.69 | |
| 04/18/06 | 0.25 | U | 0.25 | U | 0.225 | U | 0.9 | J | 3.89 | |
| 10/18/06 | 0.075 | U, CSL | 0.075 | U | 0.05 | U | 0.52 | J | 3.19 | |

**Gannett Fleming**

ANALYTICAL RESULTS FROM PLUME 1/2 MONITORING WELLS

| Date | MW-43A | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1, 1 - DCA | | 1, 1 - DCE | | PCE | | 1, 1, 1 - TCA | | TCE | |
| MCL/ES/PAL Limitations | None/850/85 | | 7/7/0.7 | | 5/5/0.5 | | 200/200/40 | | 5/5/0.5 | |
| 10/15/85 | | NA | | NA | | NA | | NA | 5 | |
| 04/19/91 | 0.5 | | 0.15 | U | 0.4 | | 3 | | 7 | J |
| 12/16/91 | 0.6 | | 0.1 | U | 0.2 | J | 3 | | 6 | |
| 06/15/92 | | NA | | NA | | NA | | NA | 6 | |
| 06/20/92 | | NA | | NA | | NA | | NA | 6 | |
| 07/15/92 | | NA | 0.5 | U | | NA | 0.5 | U | 6 | |
| 06/15/95 | | NA | | NA | | NA | | NA | 5 | |
| 07/27/95 | 2 | J | | NA | | NA | 4 | J | 5 | J |
| 01/10/96 | | NA | | NA | | NA | | NA | 5 | |
| 03/16/98 | | NA | | NA | | NA | | NA | 3.8 | |
| 04/16/99 | 2.68 | CSH, MSH | 0.227 | J, MSH | 0.276 | J, Dup | 4.72 | | 4.36 | CSH |
| 10/07/99 | 2.78 | | 0.161 | J, MSH | 0.158 | J, MSL | 4.95 | | 3.72 | |
| 05/23/00 | 2.49 | | 0.282 | J, CSH | 0.18 | J | 4.03 | | 3.75 | |
| 10/12/00 | 1.04 | | 0.207 | J | 0.28 | J | 7.37 | | 4.87 | |
| 05/09/01 | 1.56 | | 0.075 | U | 0.178 | J | 3.15 | | 3.0 | |
| 10/18/01 | 0.68 | J | 0.19 | U | 0.13 | U | 1.98 | | 3.41 | |
| 04/22/02 | 0.18 | U | 0.195 | U, SPL | 0.16 | U, SPL | 1.51 | | 2.6 | |
| 10/23/02 | 0.808 | J | 0.195 | U | 0.16 | U | 2.67 | | 3.3 | |
| 04/09/03 | 0.18 | U | 0.195 | U | 0.16 | U | 0.981 | J | 3.08 | |
| 10/08/03 | 0.63 | J | 0.195 | U | 0.16 | U | 2.2 | | 3.46 | |
| 04/13/04 | 0.25 | U | 0.25 | U | 0.225 | U | 1.69 | | 3.02 | |
| 10/19/04 | 0.602 | J | 0.25 | U | 0.225 | U | 1.55 | | 3.04 | |
| 04/12/05 | 0.25 | U | 0.25 | U | 0.225 | U | 1.21 | J | 2.92 | |
| 10/11/05 | 0.25 | U | 0.25 | U | 0.225 | U | 1.04 | J | 3.46 | |
| 04/18/06 | 0.25 | U | 0.25 | U | 0.225 | U | 1.61 | | 3.65 | |
| 10/18/06 | 0.41 | J | 0.16 | J | 0.30 | J | 0.10 | U | 3.90 | |

**Gannett Fleming**

ANALYTICAL RESULTS FROM PLUME 1/2 MONITORING WELLS

| Date | MW-43B | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1, 1 - DCA | | 1, 1 - DCE | | PCE | | 1, 1, 1 - TCA | | TCE | |
| MCL/ES/PAL Limitations | None/850/85 | | 7/7/0.7 | | 5/5/0.5 | | 200/200/40 | | 5/5/0.5 | |
| 10/15/85 | | NA | | NA | | NA | | NA | 4.7 | |
| 04/23/91 | 1 | | 0.3 | | 0.3 | | 2 | | 2.5 | U |
| 12/16/91 | 1 | | 0.3 | | 0.2 | J | 3 | | 4 | |
| 06/15/92 | | NA | | NA | | NA | | NA | 4 | |
| 06/20/92 | | NA | | NA | | NA | | NA | 4 | |
| 07/15/92 | | NA | | NA | | NA | | NA | 4 | |
| 06/15/95 | | NA | | NA | | NA | | NA | 2 | |
| 07/27/95 | 4 | J | 0.3 | J | | NA | 6 | J | 2 | J |
| 03/16/98 | | NA | | NA | | NA | | NA | 1.01 | |
| 04/16/99 | 9.52 | CSH, MSH | 1.11 | MSH | 0.38 | J, Dup | 15.3 | | 3.57 | CSH |
| 10/07/99 | 9.16 | | 1.1 | | 0.304 | J, MSL | 15.3 | | 2.93 | |
| 05/23/00 | 6.35 | | 0.918 | CSH | 0.263 | J | 8.27 | | 2.19 | |
| 10/12/00 | 1.57 | | 0.075 | U | 0.075 | U | 2.39 | | 0.73 | |
| 05/09/01 | 0.371 | J | 0.075 | U | 0.075 | U | 0.718 | | 0.2 | U |
| 10/18/01 | 3.01 | | 0.19 | U | 0.313 | J | 5.37 | | 2.63 | |
| 04/22/02 | 2.35 | | 0.195 | U, SPL | 0.16 | U, SPL | 6 | | 1.81 | |
| 10/23/02 | 3.37 | | 0.195 | U | 0.33 | J, Dup | 6.38 | | 2.49 | |
| 04/09/03 | 1.06 | J | 0.195 | U | 0.16 | U | 3.77 | | 2.24 | |
| 10/08/03 | 2.34 | | 0.195 | U | 0.16 | U | 4.61 | | 2.43 | |
| 04/13/04 | 1.86 | | 0.25 | U | 0.225 | U | 0.21 | U | 2.27 | |
| 10/19/04 | 1.97 | | 0.25 | U | 0.225 | U | 3.90 | | 2.62 | |
| 04/12/05 | 1.27 | J | 0.25 | U | 0.225 | U | 2.91 | | 2.44 | |
| 10/11/05 | 1.18 | J | 0.25 | U | 0.225 | U | 2.84 | | 2.74 | |
| 04/18/06 | 1.44 | J | 0.25 | U | 0.225 | U | 2.77 | | 3.13 | |
| 10/18/06 | 1.00 | | 0.50 | | 0.32 | J | 2.79 | | 3.05 | |

**Gannett Fleming**

ANALYTICAL RESULTS FROM PLUME 1/2 MONITORING WELLS

| Date | MW-45A | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1, 1 - DCA | | 1, 1 - DCE | | PCE | | 1, 1, 1 - TCA | | TCE | |
| MCL/ES/PAL Limitations | None/850/85 | | 7/7/0.7 | | 5/5/0.5 | | 200/200/40 | | 5/5/0.5 | |
| 10/15/85 | | NA | | NA | | NA | | NA | **2** | |
| 12/19/91 | 0.8 | J | 0.3 | J | 0.3 | J | 9 | J | **2** | J |
| 06/15/92 | | NA | | NA | | NA | | NA | **2** | |
| 06/20/92 | | NA | | NA | | NA | | NA | **2** | |
| 07/15/92 | | NA | | NA | | NA | | NA | **2** | |
| 06/15/95 | | NA | | NA | | NA | | NA | **2** | |
| 07/27/95 | 0.4 | J | | NA | | NA | 4 | J | **2** | J |
| 03/16/98 | | NA | | NA | | NA | | NA | **1.43** | |
| 04/15/99 | 0.301 | CSH, J | 0.1 | U | 0.353 | J | 3.62 | | **3.08** | MSH |
| 10/07/99 | 0.075 | U | 0.075 | U | 0.171 | J | 1.1 | Dup | **1.74** | |
| 05/23/00 | 0.075 | U | 0.075 | U, CSH | 0.171 | J | 0.772 | | 0.2 | U |
| 10/12/00 | 0.075 | U | 0.075 | U | 0.075 | U | 0.29 | J | **0.868** | |
| 05/09/01 | 0.075 | U | 0.075 | U | 0.075 | U | 0.075 | U | 0.2 | U |
| 10/17/01 | 0.19 | U | 0.19 | U | 0.13 | U | 0.1 | U | **0.76** | J |
| 04/22/02 | 0.18 | U | 0.195 | U, SPL | 0.16 | U, SPL | 0.21 | U | 0.18 | U |
| 10/24/02 | 0.18 | U | 0.195 | U | 0.16 | U | 0.21 | U | **0.593** | J |
| 04/10/03 | 0.18 | U | 0.195 | U | 0.16 | U | 0.21 | U | 0.466 | J |
| 10/08/03 | 0.18 | U | 0.195 | U | 0.16 | U | 0.21 | U | **0.557** | J |
| 04/14/04 | 0.25 | U | 0.25 | U | 0.225 | U | 0.21 | U | **0.823** | J |
| 10/19/04 | 0.25 | U | 0.25 | U | 0.225 | U | 0.21 | U | **0.524** | J |
| 04/12/05 | 0.25 | U | 0.25 | U | 0.225 | U | 0.21 | U | **0.814** | J |
| 10/11/05 | 0.25 | U | 0.25 | U | 0.225 | U | 0.21 | U | **0.981** | J |
| 04/18/06 | 0.25 | U | 0.25 | U | 0.225 | U | 0.21 | U | **1.18** | J |
| 10/18/06 | 0.075 | U, CSL | 0.075 | U | 0.05 | U | 0.10 | U | **0.61** | J |

**Gannett Fleming**

ANALYTICAL RESULTS FROM PLUME 1/2 MONITORING WELLS

| Date | MW-45B | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1, 1 - DCA | | 1, 1 - DCE | | PCE | | 1, 1, 1 - TCA | | TCE | |
| MCL/ES/PAL Limitations | None/850/85 | | 7/7/0.7 | | 5/5/0.5 | | 200/200/40 | | 5/5/0.5 | |
| 10/15/85 | | NA | | NA | | NA | | NA | 2 | |
| 12/19/91 | 6 | | 2 | | 0.3 | | 56 | J | 9 | |
| 06/15/92 | | NA | | NA | | NA | | NA | 9 | |
| 06/20/92 | | NA | | NA | | NA | | NA | 9 | |
| 07/15/92 | | NA | | NA | | NA | | NA | 9 | |
| 06/15/95 | | NA | | NA | | NA | | NA | 3 | |
| 07/27/95 | 1 | J | 0.7 | J | | NA | 11 | | 3 | J |
| 03/16/98 | . | NA | | NA | | NA | | NA | 1.69 | |
| 04/15/99 | 0.774 | CSH | 0.424 | J | 0.303 | J | 7.15 | | 5.68 | MSH |
| 10/07/99 | 0.721 | Dup | 0.389 | J | 0.257 | J | 5.05 | Dup | 6.52 | |
| 05/23/00 | 0.075 | U | 0.075 | U, CSH | 0.075 | U | 1.03 | | 1.63 | |
| 10/12/00 | 0.338 | J | 0.166 | J | 0.258 | J | 2.85 | | 5.34 | |
| 05/09/01 | 0.075 | U | 0.075 | U | 0.183 | J | 1.45 | | 4.2 | |
| 10/17/01 | 0.19 | U | 0.19 | U | 0.13 | U | 0.567 | J | 3.31 | |
| 04/22/02 | 0.18 | U | 0.195 | U, SPL | 0.16 | U, SPL | 0.489 | J | 3.19 | |
| 10/24/02 | 0.18 | U | 0.195 | U | 0.16 | U | 0.907 | J | 3.78 | |
| 04/10/03 | 0.18 | U | 0.195 | U | 0.16 | U | 0.21 | U | 2.99 | |
| 10/08/03 | 0.18 | U | 0.195 | U | 0.16 | U | 0.848 | J | 3.9 | |
| 04/14/04 | 0.25 | U | 0.25 | U | 0.225 | U | 0.587 | J | 3.23 | |
| 10/19/04 | 0.25 | U | 0.25 | U | 0.225 | U | 0.741 J | J | 3.94 | |
| 04/12/05 | 0.25 | U | 0.25 | U | 0.225 | U | 0.512 | J | 3.44 | |
| 10/11/05 | 0.25 | U | 0.25 | U | 0.225 | U | 0.516 | J | 4.06 | |
| 04/18/06 | 0.25 | U | 0.25 | U | 0.225 | U | 0.861 | J | 4.37 | |
| 10/18/06 | 0.075 | U, CSL | 0.075 | U | 0.05 | U | 0.60 | J | 3.42 | |

**Gannett Fleming**

ANALYTICAL RESULTS FROM PLUME 1/2 MONITORING WELLS

| Date | MW-45C | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1, 1 - DCA | | 1, 1 - DCE | | PCE | | 1, 1, 1 - TCA | | TCE | |
| MCL/ES/PAL Limitations | None/850/85 | | 7/7/0.7 | | 5/5/0.5 | | 200/200/40 | | 5/5/0.5 | |
| 10/15/85 | | NA | | NA | | NA | | NA | 3 | |
| 12/19/91 | 3 | | 1 | | 0.3 | | 25 | | 9 | |
| 06/15/92 | | NA | | NA | | NA | | NA | 9 | |
| 06/20/92 | | NA | | NA | | NA | | NA | 9 | |
| 07/15/92 | | NA | 0.5 | U | | NA | 0.5 | U | 9 | |
| 06/15/95 | | NA | | NA | | NA | | NA | 8 | |
| 07/27/95 | 2 | J | 0.5 | J | | NA | 12 | | 8 | J |
| 01/11/96 | | NA | | NA | | NA | | NA | 7.6 | |
| 03/16/98 | | NA | | NA | | NA | | NA | 1.19 | |
| 04/15/99 | 1.42 | CSH | 0.1 | U | 0.258 | J | 3.14 | | 5.65 | MSH |
| 10/07/99 | 1.09 | | 0.075 | U | 0.198 | J | 2.21 | | 5.09 | |
| 05/23/00 | 0.264 | J | 0.075 | U, CSH | 0.075 | U | 0.605 | | 0.2 | U |
| 10/12/00 | 0.539 | | 0.075 | U | 0.075 | U | 1.35 | | 3.23 | |
| 05/09/01 | 0.274 | J | 0.075 | U | 0.229 | J | 1.06 | | 3.85 | |
| 10/17/01 | 0.19 | U | 0.19 | U | 0.13 | U | 0.567 | J | 0.947 | |
| 04/22/02 | 0.18 | U | 0.195 | U, SPL | 0.16 | U, SPL | 0.772 | J | 3.62 | |
| 10/23/02 | 0.18 | U | 0.195 | U | 0.16 | U | 1.22 | J | 4.63 | |
| 04/10/03 | 0.18 | U | 0.195 | U | 0.16 | U | 0.21 | U | 4.63 | |
| 10/08/03 | 0.18 | U | 0.195 | U | 0.16 | U | 1.29 | J | 4.83 | |
| 04/14/04 | 0.25 | U | 0.25 | U | 0.225 | U | 0.901 | J | 3.82 | |
| 10/19/04 | 0.25 | U | 0.25 | U | 0.225 | U | 0.804 | J | 4.01 | |
| 04/12/05 | 0.25 | U | 0.25 | U | 0.225 | U | 0.593 | J | 3.96 | |
| 10/11/05 | 0.25 | U | 0.25 | U | 0.225 | U | 0.517 | J | 4.16 | |
| 04/18/06 | 0.25 | U | 0.25 | U | 0.225 | U | 0.93 | J | 4.43 | |
| 10/18/06 | 0.19 | J | 0.075 | U | 0.21 | J | 0.78 | | 4.04 | |

**Gannett Fleming**

ANALYTICAL RESULTS FROM PLUME 1/2 MONITORING WELLS

| Date | MW-53A | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1, 1- DCA | | 1, 1 - DCE | | PCE | | 1, 1, 1 - TCA | | TCE | |
| MCL/ES/PAL Limitations | None/850/85 | | 7/7/0.7 | | 5/5/0.5 | | 200/200/40 | | 5/5/0.5 | |
| 10/15/85 | | NA | | NA | | NA | | NA | 10 | |
| 12/16/91 | 3 | | 1 | | 0.7 | | 30 | | 7 | |
| 06/15/92 | | NA | | NA | | NA | | NA | 7 | |
| 06/20/92 | | NA | | NA | | NA | | NA | 7 | |
| 07/15/92 | | NA | 0.5 | U | | NA | 0.5 | U | 7 | |
| 06/15/95 | | NA | | NA | | NA | | NA | 7 | |
| 07/27/95 | 2 | J | 1 | J | 0.7 | J | 19 | | 7 | J |
| 01/11/96 | | NA | | NA | | NA | | NA | 5.5 | |
| 03/16/98 | | NA | | NA | | NA | | NA | 5.2 | |
| 04/15/99 | 0.547 | CSH, J | 0.312 | J | 0.568 | J | 5.56 | | 4.79 | MSH |
| 10/07/99 | 0.217 | J, Dup | 0.075 | U | 0.259 | | 1.79 | Dup | 2.52 | |
| 05/23/00 | 0.075 | U | 0.075 | U, CSH | 0.204 | J | 0.72 | | 0.856 | J |
| 10/12/00 | 0.075 | U, CSH, SPH | 0.075 | U | 0.075 | U | 0.239 | J | 0.2 | U |
| 05/10/01 | 0.075 | U | 0.075 | U | 0.075 | U | 0.195 | J | 0.801 | J |
| 10/17/01 | 0.19 | U | 0.19 | U | 0.13 | U | 0.1 | U | 0.761 | J |
| 04/22/02 | 0.18 | U | 0.195 | U, SPL | 0.16 | U, SPL | 0.21 | U | 0.18 | U |
| 10/24/02 | 0.18 | U | 0.195 | U | 0.16 | U | 0.21 | U | 0.18 | U |
| 04/10/03 | 0.18 | U | 0.195 | U | 0.16 | U | 0.21 | U | 0.535 | J |
| 07/23/03 | 0.18 | U | 0.195 | U | 0.16 | U | 0.21 | U | 0.18 | U |
| 04/14/04 | 0.25 | U | 0.25 | U | 0.225 | U | 0.21 | U | 0.25 | U |
| 10/21/04 | 0.25 | U | 0.25 | U | 0.225 | U | 0.21 | U | 0.25 | U |
| 04/12/05 | 0.25 | U | 0.25 | U | 0.225 | U | 0.21 | U | 0.627 | J |
| 10/11/05 | 0.25 | U | 0.25 | U | 0.225 | U | 0.21 | U | 1.77 | |
| 04/18/06 | 0.25 | U | 0.25 | U | 0.225 | U | 0.746 | J | 2.69 | |
| 10/18/06 | 0.075 | U, CSL | 0.075 | U | 0.16 | J | 0.42 | J | 2.14 | |

**Gannett Fleming**

ANALYTICAL RESULTS FROM PLUME 1/2 MONITORING WELLS

| Date | MW-53B | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1, 1 - DCA | | 1, 1 - DCE | | PCE | | 1, 1, 1 - TCA | | TCE | |
| MCL/ES/PAL Limitations | None/850/85 | | 7/7/0.7 | | 5/5/0.5 | | 200/200/40 | | 5/5/0.5 | |
| 10/15/85 | | NA | | NA | | NA | | NA | 10 | |
| 12/13/91 | 4 | | 2 | | 0.4 | | 36 | | 12 | |
| 06/15/92 | | NA | | NA | | NA | | NA | 12 | |
| 06/20/92 | | NA | | NA | | NA | | NA | 12 | |
| 07/15/92 | | NA | | NA | | NA | | NA | 12 | |
| 06/15/95 | | NA | | NA | | NA | | NA | 2 | |
| 07/27/95 | 0.4 | J | | NA | | NA | 4 | J | 2 | J |
| 03/16/98 | | NA | | NA | | NA | | NA | 5.52 | |
| 04/15/99 | 1.41 | CSH | 0.244 | J | 0.415 | J | 4.34 | | 5.84 | MSH |
| 10/07/99 | 1.35 | Dup | 0.196 | J | 0.224 | J | 3.51 | Dup | 6.16 | |
| 05/23/00 | 0.514 | | 0.075 | U | 0.075 | U | 1.75 | | 3.57 | |
| 10/12/00 | 0.075 | U, CSH, SPH | 0.075 | U | 0.075 | U | 0.445 | J | 1.14 | J |
| 05/10/01 | 0.075 | U | 0.075 | U | 0.075 | U | 0.199 | J | 0.741 | J |
| 10/17/01 | 0.19 | U | 0.19 | U | 0.13 | U | 0.1 | U | 0.817 | J |
| 04/22/02 | 0.18 | U | 0.195 | U, SPL | 0.16 | U, SPL | 0.899 | J | 3.76 | |
| 10/24/02 | 0.18 | U | 0.195 | U | 0.16 | U | 1.42 | | 4.68 | |
| 04/10/03 | 0.18 | U | 0.195 | U | 0.16 | U | 0.463 | J | 4.44 | |
| 10/08/03 | 0.38 | J | 0.195 | J | 0.16 | J | 1.4 | | 5.3 | |
| 04/14/04 | 0.25 | U | 0.25 | U | 0.225 | U | 0.919 | | 4.08 | |
| 07/15/04 | 0.25 | U | 0.25 | U | 0.225 | U | 1.18 | J | 5.08 | |
| 10/21/04 | 0.25 | U | 0.25 | U | 0.225 | U | 0.862 | J | 4.47 | |
| 04/12/05 | 0.25 | U | 0.25 | U | 0.225 | U | 0.657 | J | 3.94 | |
| 07/12/05 | 0.25 | U | 0.25 | U | 0.225 | U | 0.592 | J | 3.40 | |
| 10/11/05 | 0.25 | U | 0.25 | U | 0.225 | U | 0.586 | J | 4.26 | |
| 04/18/06 | 0.25 | U | 0.25 | U | 0.225 | U | 0.855 | J | 5.00 | |
| 07/26/06 | 0.25 | U | 0.25 | U | 0.355 | U | 0.75 | J | 3.51 | |
| 10/18/06 | 0.075 | U, CSL | 0.075 | U | 0.05 | U | 0.58 | J | 3.26 | |

**Gannett Fleming**

ANALYTICAL RESULTS FROM PLUME 1/2 MONITORING WELLS

| Date | MW-67A | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1, 1 - DCA | | 1, 1 - DCE | | PCE | | 1, 1, 1 - TCA | | TCE | |
| MCL/ES/PAL Limitations | None/850/85 | | 7/7/0.7 | | 5/5/0.5 | | 200/200/40 | | 5/5/0.5 | |
| 7/92 | 0.1 | U | 0.15 | U | 0.15 | U | 0.45 | U | 0.1 | U |
| 02/08/94 | 5 | | 0.07 | | 0.9 | | 18 | | 10 | |
| 03/28/94 | 1.6 | | 0.1 | ND | 0.1 | ND | 5 | | 18 | |
| 06/06/94 | 1 | | 0.1 | ND | 0.1 | ND | 1.6 | | 11 | |
| 08/23/94 | 0.1 | ND | 0.1 | ND | 0.1 | ND | 0.1 | ND | 2.5 | |
| 10/27/94 | 0.1 | ND | 0.1 | ND | 0.1 | ND | 0.1 | ND | 2.8 | |
| 01/19/95 | 0.1 | ND | 0.1 | ND | 0.1 | ND | 0.1 | ND | 1.7 | |
| 04/19/95 | 0.1 | ND | 0.1 | ND | 0.1 | ND | 0.1 | ND | 2.5 | |
| 07/18/95 | 0.1 | ND | 0.1 | ND | 0.1 | ND | 0.1 | ND | 1.6 | |
| 09/12/95 | 0.1 | ND | 0.1 | ND | 0.1 | ND | 0.1 | ND | 1.2 | |
| 01/08/96 | 0.1 | ND | 0.1 | ND | 0.1 | ND | 0.1 | ND | 1.6 | |
| 04/17/96 | 0.6 | | 0.1 | ND | 0.17 | | 0.93 | | 1.5 | |
| 07/09/96 | 0.1 | ND | 0.1 | ND | 0.1 | ND | 0.68 | | 1.8 | |
| 10/02/96 | 0.1 | ND | 0.1 | ND | 0.1 | ND | 0.65 | | 1.3 | |
| 04/01/97 | 0.245 | | 0.1 | ND | 0.1 | ND | 1.08 | | 3.9 | |
| 05/20/97 | 0.1 | ND | 0.45 | | 0.1 | ND | 1.11 | | 0.18 | ND |
| 07/21/97 | 0.2 | | 0.1 | ND | 0.1 | ND | 0.96 | | 2.28 | |
| 10/22/97 | 0.432 | | 0.5 | U | 0.6 | U | 1.76 | | 5.62 | |
| 01/27/98 | 0.604 | | 0.1 | 0.1 | 0.266 | | 1.7 | | 5.78 | |
| 04/22/98 | 0.663 | | 0.1 | 0.1 | 0.213 | | 1.66 | | 4.83 | |
| 07/20/98 | 1.55 | | 0.1 | 0.1 | 0.47 | | 2.34 | | 10.5 | |
| 10/27/98 | 0.702 | | 0.1 | 0.1 | 0.249 | | 1.15 | | 2.98 | |
| 01/18/99 | 0.1 | U | 0.1 | 0.1 | 0.1 | U | 0.379 | J | 1.42 | |
| 04/12/99 | 0.1 | U | 0.1 | 0.1 | 0.226 | J | 0.271 | J | 1.06 | CSH, J |
| 07/27/99 | 1.09 | | 0.075 | U | 0.324 | J | 1.52 | | 3.42 | |
| 10/06/99 | 0.297 | J | 0.075 | U | 0.207 | J | 0.606 | | 4.17 | |
| 02/02/00 | 0.075 | U | 0.075 | U | 0.227 | J, CSL | 0.267 | J | 2.02 | |
| 06/07/00 | 0.075 | U | 0.075 | U | 0.075 | U | 0.241 | J | 1.57 | |
| 07/18/00 | 0.075 | U | 0.075 | U | 0.075 | U | 0.241 | J | 1.42 | |
| 10/11/00 | 0.075 | U, CSH, SPH | 0.075 | U | 0.075 | U | 0.075 | U | 0.2 | U |
| 01/24/01 | 0.075 | U, SPH | 0.075 | U | 0.075 | U | 0.075 | U, SPH | 1.61 | |
| 05/08/01 | 0.264 | | 0.075 | U | 0.166 | J | 0.349 | J | 1.03 | J |
| 07/17/01 | 0.19 | U | 0.19 | U | 0.13 | U | 0.273 | J | 1.31 | |
| 10/18/01 | 0.19 | U | 0.19 | U | 0.13 | U | 0.1 | U | 1.08 | |
| 01/09/02 | 0.19 | U | 0.19 | U | 0.13 | U | 0.1 | U | 1.16 | |
| 04/22/02 | 0.18 | U | 0.195 | U | 0.16 | U | 0.21 | U | 1.27 | |
| 07/09/02 | 0.18 | U | 0.195 | U | 0.16 | U | 0.21 | U | 1.13 | J |
| 10/22/02 | 0.18 | U | 0.195 | U | 0.16 | U | 0.21 | U | 0.584 | J, Dup |
| 01/07/03 | 0.18 | U | 0.195 | U | 0.16 | U | 0.21 | U | 0.506 | J |
| 04/09/03 | 0.18 | U | 0.195 | U | 0.16 | U | 0.21 | U | 0.912 | J, CSH |
| 10/07/03 | 0.18 | U | 0.195 | U | 0.382 | J | 0.556 | J | 11.5 | |
| 02/24/04 | 0.25 | U | 0.125 | U | 0.225 | U | 0.21 | U | 3.70 | |
| 03/16/04 | 0.25 | U | 0.25 | U | 0.225 | U | 0.21 | U | 2.27 | |
| 04/13/04 | 0.25 | U | 0.25 | U | 0.225 | U | 0.21 | U | 1.95 | |
| 05/24/04 | 0.25 | U | 0.25 | U | 0.225 | U | 0.21 | U | 1.67 | |
| 06/22/04 | 0.25 | U | 0.25 | U | 0.225 | U | 0.21 | U | 0.911 | J |
| 07/15/04 | 0.25 | U | 0.25 | U | 0.225 | U | 0.21 | U | 0.894 | U |

**Gannett Fleming**

ANALYTICAL RESULTS FROM PLUME 1/2 MONITORING WELLS

| Date | MW-67A | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1, 1 - DCA | | 1, 1 - DCE | | PCE | | 1, 1, 1 - TCA | | TCE | |
| MCL/ES/PAL Limitations | None/850/85 | | 7/7/0.7 | | 5/5/0.5 | | 200/200/40 | | 5/5/0.5 | |
| 10/18/04 | 0.25 | U | 0.25 | U | 0.225 | U | 0.21 | U | 1.06 | J |
| 10/18/04 | 0.25 | U | 0.25 | U | 0.225 | U | 0.21 | U | 1.10 | J, Dup |
| 01/18/05 | 0.25 | U | 0.25 | U | 0.225 | U | 0.21 | U | 0.25 | U |
| 04/14/05 | 0.25 | U | 0.25 | U | 0.225 | U | 0.21 | U | 0.25 | U |
| 10/11/05 | 0.25 | U | 0.25 | U | 0.225 | U | 0.21 | U | 0.25 | U |
| 04/17/06 | 0.25 | U | 0.25 | U | 0.225 | U | 0.21 | U | 0.25 | U |
| 10/17/06 | 0.075 | U, CSL | 0.075 | U | 0.05 | U | 0.10 | U | 0.10 | U |

**Gannett Fleming**

ANALYTICAL RESULTS FROM PLUME 1/2 MONITORING WELLS

| Date | MW-67B | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1, 1 - DCA | | 1, 1 - DCE | | PCE | | 1, 1, 1 - TCA | | TCE | |
| MCL/ES/PAL Limitations | None/850/85 | | 7/7/0.7 | | 5/5/0.5 | | 200/200/40 | | 5/5/0.5 | |
| 7/92 | 0.1 | U | 0.15 | U | 0.15 | U | 0.6 | J | **1** | |
| 02/08/94 | 0.2 | | 0.1 | ND | 0.04 | | 0.4 | | **0.7** | |
| 03/28/94 | 0.1 | ND | 0.1 | ND | **0.7** | | 0.1 | ND | **5.1** | |
| 06/06/94 | 0.1 | ND | 0.1 | ND | **0.65** | | 0.1 | ND | **1.2** | |
| 08/23/94 | 0.1 | ND | 0.1 | ND | **0.6** | | 0.1 | ND | 0.18 | ND |
| 10/27/94 | 0.1 | ND | 0.1 | ND | 0.1 | ND | 0.1 | ND | **1.2** | |
| 01/19/95 | 0.1 | ND | 0.1 | ND | 0.1 | ND | 0.1 | ND | 0.18 | ND |
| 04/19/95 | 0.1 | ND | 0.1 | ND | 0.1 | ND | 0.1 | ND | 0.18 | ND |
| 07/18/95 | 0.1 | ND | 0.1 | ND | 0.1 | ND | 0.1 | ND | 0.18 | ND |
| 09/12/95 | 0.1 | ND | 0.1 | ND | 0.1 | ND | 0.1 | ND | 0.18 | ND |
| 01/08/96 | 0.1 | ND | 0.1 | ND | 0.1 | ND | 0.1 | ND | 0.18 | ND |
| 04/17/96 | 0.64 | | 0.1 | ND | 0.16 | | 0.84 | | **0.99** | |
| 07/09/96 | 0.1 | ND | 0.1 | ND | 0.1 | ND | 0.1 | ND | 0.39 | |
| 10/02/96 | 0.42 | | 0.1 | ND | 0.18 | | 0.74 | | 0.39 | |
| 05/20/97 | 0.1 | ND | 0.6 | | 0.1 | ND | 0.99 | | 0.18 | ND |
| 10/22/97 | 1.64 | | 0.25 | U | 0.3 | U | 2.05 | | **1.5** | |
| 01/27/98 | 1.13 | | 0.1 | U | 0.1 | U | 1.58 | | **1.01** | |
| 04/22/98 | 0.889 | | 0.1 | U | 0.1 | U | 1.38 | | **0.723** | |
| 07/20/98 | 0.1 | U | 0.1 | U | 0.1 | U | 0.279 | | 0.403 | |
| 10/27/98 | 0.596 | | 0.1 | U | 0.1 | U | 0.733 | | **0.68** | |
| 01/18/99 | 0.1 | U | 0.1 | U | 0.1 | U | 0.311 | J | 0.387 | J |
| 04/12/99 | 0.1 | U | 0.1 | U | 0.1 | U | 0.264 | J | 0.18 | U |
| 07/27/99 | 0.437 | J | 0.075 | U | 0.075 | U | 0.521 | J | 0.464 | J |
| 10/06/99 | 0.478 | J | 0.075 | U | 0.075 | U | 0.502 | | **0.741** | |
| 02/02/00 | 0.254 | J | 0.075 | U | 0.075 | U, CSL | 0.261 | J | 0.436 | J |
| 06/07/00 | 0.349 | J | 0.075 | U | 0.075 | U | 0.296 | J | 0.2 | U |
| 07/18/00 | 0.18 | J | 0.075 | U | 0.075 | U | 0.261 | J | **0.5** | J |
| 10/11/00 | 0.075 | U, CSH, SPH | 0.075 | U | 0.075 | U | 0.075 | U | 0.401 | J |
| 01/24/01 | 0.075 | U, SPH | 0.075 | U | 0.075 | U | 0.075 | U, SPH | 0.2 | U |
| 05/08/01 | 0.175 | J | 0.075 | U | 0.075 | U | 0.176 | J | 0.2 | U |
| 07/17/01 | 0.19 | U | 0.19 | U | 0.13 | U | 0.283 | J | 0.416 | J |
| 10/18/01 | 0.19 | U | 0.19 | U | 0.13 | U | 0.1 | U | 0.13 | U |
| 01/09/02 | 0.19 | U | 0.19 | U | 0.13 | U | 0.1 | U | 0.13 | U |
| 04/22/02 | 0.18 | U | 0.195 | U | 0.16 | U | 0.21 | U | 0.426 | J |
| 07/09/02 | 0.18 | U | 0.195 | U | 0.16 | U | 0.21 | U | 0.18 | U |
| 10/22/02 | 0.18 | U | 0.195 | U | 0.16 | U | 0.21 | U | 0.18 | U |
| 01/07/03 | 0.18 | U | 0.195 | U | 0.16 | U | 0.21 | U | 0.18 | U |
| 04/09/03 | 0.18 | U | 0.195 | U | 0.16 | U | 0.21 | U | 0.429 | J, CSH |
| 07/22/03 | 0.18 | U | 0.195 | U | 0.16 | U | 0.21 | U | 0.18 | U |
| 02/24/04 | 0.25 | U | 0.25 | U | 0.225 | U | 0.21 | U | 0.25 | U |
| 03/16/04 | 0.25 | U | 0.25 | U | 0.225 | U | 0.21 | U | 0.25 | U |
| 04/13/04 | 0.25 | U | 0.25 | U | 0.225 | U | 0.21 | U | 0.25 | U |
| 05/24/04 | 0.25 | U | 0.25 | U | 0.225 | U | 0.21 | U | 0.25 | U |
| 06/22/04 | 0.25 | U | 0.25 | U | 0.225 | U | 0.21 | U | 0.25 | U |
| 07/15/04 | 0.25 | U | 0.25 | U | 0.225 | U | 0.21 | U | 0.25 | U |
| 07/12/05 | 0.25 | U | 0.25 | U | 0.225 | U | 0.21 | U | 0.25 | U |
| 07/25/06 | 0.25 | U | 0.25 | U | 0.355 | U | 0.21 | U | 0.25 | U |

**Gannett Fleming**

ANALYTICAL RESULTS FROM PLUME 1/2 MONITORING WELLS

| Date | MW-68A | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1, 1 - DCA | | 1, 1 - DCE | | PCE | | 1, 1, 1 - TCA | | TCE | |
| MCL/ES/PAL Limitations | None/850/85 | | 7/7/0.7 | | 5/5/0.5 | | 200/200/40 | | 5/5/0.5 | |
| 7/92 | 0.1 | U | 0.15 | U | 0.15 | U | 0.9 | | 3 | |
| 02/08/94 | 0.1 | ND | 0.1 | ND | 0.03 | | 0.1 | | 1 | |
| 03/28/94 | 0.1 | ND | 0.1 | ND | 0.1 | ND | 0.1 | ND | 1.5 | |
| 06/06/94 | 0.1 | ND | 0.1 | ND | 0.1 | ND | 0.1 | ND | 1.1 | |
| 08/23/94 | 0.1 | ND | 0.1 | ND | 0.1 | ND | 0.1 | ND | 1.6 | |
| 10/27/94 | 0.1 | ND | 0.1 | ND | 0.1 | ND | 0.1 | ND | 1.4 | |
| 01/19/95 | 0.1 | ND | 0.1 | ND | 0.1 | ND | 0.1 | ND | 1.4 | |
| 04/19/95 | 0.1 | ND | 0.1 | ND | 0.1 | ND | 0.1 | ND | 1.5 | |
| 07/18/95 | 0.1 | ND | 0.1 | ND | 0.1 | ND | 0.1 | ND | 1.1 | |
| 10/09/95 | 0.1 | ND | 0.1 | ND | 0.1 | ND | 0.1 | ND | 2 | |
| 01/08/96 | 0.1 | ND | 0.1 | ND | 0.1 | ND | 0.1 | ND | 1.5 | |
| 04/17/96 | 0.1 | ND | 0.1 | ND | 0.1 | ND | 0.1 | ND | 1.6 | |
| 07/09/96 | 1.4 | | 0.1 | ND | 0.1 | ND | 11 | | 3.1 | |
| 10/02/96 | 0.58 | | 0.1 | ND | 0.24 | | 5.8 | | 3.7 | |
| 04/01/97 | 0.248 | | 0.1 | ND | 0.1 | ND | 1.92 | | 2.47 | |
| 05/21/97 | 0.1 | ND | 0.36 | | 0.1 | ND | 2.1 | | 5 | |
| 07/22/97 | 0.1 | ND | 0.1 | ND | 0.1 | ND | 0.1 | ND | 0.617 | |
| 10/22/97 | 0.2 | U | 0.25 | U | 0.3 | U | 0.35 | U | 1.42 | |
| 01/28/98 | 0.1 | U | 0.1 | U | 0.1 | U | 0.1 | U | 1.1 | |
| 04/22/98 | 0.1 | U | 0.1 | U | 0.1 | U | 0.1 | U | 1.09 | |
| 07/20/98 | 0.1 | U | 0.1 | U | 0.1 | U | 0.1 | U | 1.2 | |
| 10/27/98 | 0.1 | U | 0.1 | U | 0.1 | U | 0.1 | U | 0.935 | |
| 01/19/99 | 0.1 | U | 0.1 | U | 0.1 | U | 0.1 | U | 1.22 | |
| 04/12/99 | 0.1 | U | 0.1 | U | 0.1 | U | 0.1 | U | 0.926 | J |
| 07/27/99 | 0.05 | U | 0.075 | U | 0.075 | U | 0.1 | U | 0.984 | J |
| 10/06/99 | 0.075 | U | 0.075 | U | 0.075 | U | 0.075 | U | 1.34 | |
| 02/01/00 | 0.075 | U | 0.075 | U | 0.075 | U, CSL | 0.075 | U | 0.76 | J |
| 06/06/00 | 0.075 | U | 0.075 | U | 0.075 | U | 0.075 | U | 0.685 | |
| 07/18/00 | 0.075 | U | 0.075 | U | 0.075 | U | 0.075 | U | 0.578 | J |
| 10/11/00 | 0.075 | U, CSH, SPH | 0.075 | U | 0.075 | U | 0.075 | U | 0.899 | J |
| 01/24/01 | 0.075 | U, SPH | 0.075 | U | 0.075 | U | 0.075 | U, SPH | 0.705 | J |
| 05/08/01 | 0.075 | U | 0.075 | U | 0.075 | U | 0.075 | U | 0.757 | J |
| 07/17/01 | 0.19 | U | 0.19 | U | 0.13 | U | 0.1 | U | 1.14 | |
| 10/18/01 | 0.19 | U | 0.19 | U | 0.13 | U | 0.1 | U | 0.827 | J |
| 01/09/02 | 0.19 | U | 0.19 | U | 0.13 | U | 0.1 | U | 0.652 | |
| 04/22/02 | 0.18 | U | 0.195 | U | 0.16 | U | 0.21 | U | 0.18 | U |
| 07/09/02 | 0.18 | U | 0.195 | U | 0.16 | U | 0.21 | U | 0.753 | J |
| 10/23/02 | 0.18 | U | 0.195 | U | 0.16 | U | 0.21 | U | 0.635 | J, Dup |
| 01/07/03 | 0.18 | U | 0.195 | U | 0.16 | U | 0.21 | U | 0.18 | U |
| 04/09/03 | 0.18 | U | 0.195 | U | 0.16 | U | 0.21 | U | 0.505 | J, CSH |
| 07/22/03 | 0.18 | U | 0.195 | U | 0.16 | U | 0.21 | U | 0.506 | J |
| 10/07/03 | 0.18 | U | 0.195 | U | 0.16 | U | 0.21 | U | 0.575 | J |
| 02/24/04 | 0.25 | U | 0.25 | U | 0.225 | U | 0.21 | U | 0.536 | J |
| 03/16/04 | 0.25 | U | 0.25 | U | 0.225 | U | 0.21 | U | 0.25 | U |
| 04/13/04 | 0.25 | U | 0.25 | U | 0.225 | U | 0.21 | U | 0.25 | U |
| 05/24/04 | 0.25 | U | 0.25 | U | 0.225 | U | 0.21 | U | 0.25 | U |
| 06/22/04 | 0.25 | U | 0.25 | U | 0.225 | U | 0.21 | U | 0.25 | U |

**Gannett Fleming**

ANALYTICAL RESULTS FROM PLUME 1/2 MONITORING WELLS

| Date | MW-68A | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1, 1 - DCA | | 1, 1 - DCE | | PCE | | 1, 1, 1 - TCA | | TCE | |
| MCL/ES/PAL Limitations | None/850/85 | | 7/7/0.7 | | 5/5/0.5 | | 200/200/40 | | 5/5/0.5 | |
| 07/14/04 | 0.25 | U | 0.25 | U | 0.225 | U | 0.21 | U | 0.25 | U |
| 10/19/04 | 0.25 | U | 0.25 | U | 0.225 | U | 0.21 | U | 0.25 | U |
| 01/18/05 | 0.25 | U | 0.25 | U | 0.225 | U | 0.21 | U | 0.25 | U |
| 07/12/05 | 0.25 | U | 0.25 | U | 0.225 | U | 0.21 | U | 0.25 | U |
| 07/26/06 | 0.25 | U | 0.25 | U | 0.355 | U | 0.21 | U | 0.25 | U |

**Gannett Fleming**

ANALYTICAL RESULTS FROM PLUME 1/2 MONITORING WELLS

| Date | MW-68B | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1, 1 - DCA | | 1, 1 - DCE | | PCE | | 1, 1, 1 - TCA | | TCE | |
| MCL/ES/PAL Limitations | None/850/85 | | 7/7/0.7 | | 5/5/0.5 | | 200/200/40 | | 5/5/0.5 | |
| 7/92 | 1 | | 0.15 | U | 0.15 | U | 3 | | **2** | |
| 02/08/94 | 1 | | 0.1 | ND | 0.2 | | 3 | | **6** | |
| 03/28/94 | 0.1 | ND | 0.1 | ND | 0.1 | ND | 1.3 | | **2.4** | |
| 06/06/94 | 1.3 | | 0.1 | ND | 0.1 | ND | 3.7 | | **2.7** | |
| 08/23/94 | 1.6 | | 0.1 | ND | 0.1 | ND | 16 | | **5.7** | |
| 10/27/94 | 1.2 | | 0.1 | ND | 0.1 | ND | 11 | | **7.3** | |
| 01/19/95 | 0.1 | ND | 0.1 | ND | 0.1 | ND | 5.2 | | **7.5** | |
| 04/19/95 | 0.1 | ND | 0.1 | ND | 0.1 | ND | 2.7 | | **9** | |
| 07/18/95 | 0.1 | ND | 0.1 | ND | 0.1 | ND | 1.2 | | **8.6** | |
| 10/09/95 | 0.1 | ND | 0.1 | ND | 0.1 | ND | 3.1 | | **3.1** | |
| 01/08/96 | 1.3 | | 0.1 | ND | 0.1 | ND | 4.4 | | **4.7** | |
| 04/17/96 | 4 | | **1** | | 0.1 | ND | 28 | | **3.7** | |
| 07/09/96 | 0.1 | ND | 0.1 | ND | 0.1 | ND | 0.1 | | **1.4** | |
| 10/02/96 | 0.1 | ND | 0.1 | ND | 0.1 | ND | 0.1 | ND | **1.3** | |
| 04/01/97 | 0.1 | ND | 0.1 | ND | 0.1 | ND | 0.1 | ND | **1.36** | |
| 05/21/97 | 0.1 | ND | 0.1 | ND | 0.1 | ND | 0.1 | ND | **0.92** | |
| 07/22/97 | 0.28 | | 0.1 | ND | 0.1 | ND | 3.51 | | **1.41** | |
| 10/22/97 | 0.2 | U | 0.25 | U | 0.3 | U | 2.21 | | **2.07** | |
| 01/28/98 | 0.391 | | 0.1 | U | 0.1 | U | 1.8 | | **2.01** | |
| 04/22/98 | 0.1 | U | 0.1 | U | 0.1 | U | 0.609 | | **1.31** | |
| 07/20/98 | 0.259 | | 0.1 | U | 0.1 | U | 1.44 | | **1.46** | |
| 10/27/98 | 0.1 | U | 0.1 | U | 0.1 | U | 0.941 | | **0.687** | |
| 01/19/99 | 0.1 | U | 0.1 | U | 0.1 | U | 0.625 | J | **1.02** | |
| 04/12/99 | 0.1 | U | 0.1 | U | 0.1 | U | 0.557 | J | **2.09** | CSH |
| 07/27/99 | 0.178 | | 0.075 | U | 0.075 | U | 0.63 | J | **2.07** | |
| 10/06/99 | 0.158 | J | 0.075 | U | 0.075 | U | 0.561 | | **1.97** | |
| 02/01/00 | 0.075 | U | 0.075 | U | 0.075 | U, CSL | 0.336 | J | **1.33** | |
| 06/06/00 | 0.075 | U | 0.075 | U | 0.075 | U | 0.224 | J | **0.967** | J |
| 07/18/00 | 0.075 | U | 0.075 | U | 0.075 | U | 0.213 | J | **0.996** | J |
| 10/11/00 | 0.075 | U, CSH, SPH | 0.075 | U | 0.075 | U | 0.075 | U | 0.2 | U |
| 01/24/01 | 0.075 | U, SPH | 0.075 | U | 0.075 | U | 0.075 | U, SPH | **1.33** | J |
| 05/08/01 | 0.075 | U | 0.075 | U | 0.075 | U | 0.075 | U | 0.463 | J |
| 07/17/01 | 0.19 | U | 0.19 | U | 0.13 | U | 0.284 | J | **1.62** | J |
| 10/18/01 | 0.19 | U | 0.19 | U | 0.13 | U | 0.1 | U | **1.3** | |
| 01/09/02 | 0.19 | U | 0.19 | U | 0.13 | U | 0.1 | U | **0.594** | J |
| 04/22/02 | 0.18 | U | 0.195 | U | 0.16 | U | 0.21 | U | **1.48** | |
| 07/09/02 | 0.18 | U | 0.195 | U | 0.16 | U | 0.21 | U | **1.72** | |
| 10/23/02 | 0.18 | U | 0.195 | U | 0.16 | U | 0.21 | U | **1.54** | Dup |
| 01/07/03 | 0.18 | U | 0.195 | U | 0.16 | U | 0.21 | U | **1.29** | |
| 04/09/03 | 0.18 | U | 0.195 | U | 0.16 | U | 0.21 | U | **1.29** | CSH |
| 07/22/03 | 0.18 | U | 0.195 | U | 0.16 | U | 0.21 | U | **1.56** | |
| 10/07/03 | 0.18 | U | 0.195 | U | 0.16 | U | 0.21 | U | **1.01** | J |
| 02/24/04 | 0.25 | U | 0.25 | U | 0.225 | U | 0.21 | U | **1.33** | J |
| 03/16/04 | 0.25 | U | 0.25 | U | 0.225 | U | 0.21 | U | **1.47** | J |
| 04/13/04 | 0.25 | U | 0.25 | U | 0.225 | U | 0.21 | U | **1.38** | U |
| 05/24/04 | 0.25 | U | 0.25 | U | 0.225 | U | 0.21 | U | **1.53** | J |
| 06/22/04 | 0.25 | U | 0.25 | U | 0.225 | U | 0.21 | U | **1.46** | |

**Gannett Fleming**

ANALYTICAL RESULTS FROM PLUME 1/2 MONITORING WELLS

| Date | MW-68B | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1, 1 - DCA | | 1, 1 - DCE | | PCE | | 1, 1, 1 - TCA | | TCE | |
| MCL/ES/PAL Limitations | None/850/85 | | 7/7/0.7 | | 5/5/0.5 | | 200/200/40 | | 5/5/0.5 | |
| 07/14/04 | 0.25 | U | 0.25 | U | 0.225 | U | 0.21 | U | **1.58** | J |
| 10/19/04 | 0.25 | U | 0.25 | U | 0.225 | U | 0.21 | U | **1.43** | J |
| 01/18/05 | 0.25 | U | 0.25 | U | 0.225 | U | 0.21 | U | **0.898** | J |
| 04/14/05 | 0.25 | U | 0.25 | U | 0.225 | U | 0.21 | U | **0.937** | J |
| 07/12/05 | 0.25 | U | 0.25 | U | 0.225 | U | 0.21 | U | **1.11** | J |
| 10/10/05 | 0.25 | U | 0.25 | U | 0.225 | U | 0.21 | U | **1.15** | J |
| 01/18/06 | 0.25 | U | 0.25 | U | 0.225 | U | 0.21 | U | **1.01** | J |
| 04/18/06 | 0.25 | U | 0.25 | U | 0.225 | U | 0.21 | U | **1.53** | J |
| 07/25/06 | 0.25 | U | 0.25 | U | 0.355 | U | 0.53 | J | **1.44** | J |
| 10/17/06 | 0.075 | U | 0.075 | U | 0.05 | U | 0.10 | U | **1.89** | |

ANALYTICAL RESULTS FROM PLUME 1/2 MONITORING WELLS

| Date | MW-69A | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | l, l - DCA | | l, l - DCE | | PCE | | l, l, l - TCA | | TCE | |
| MCL/ES/PAL Limitations | None/850/85 | | 7/7/0.7 | | 5/5/0.5 | | 200/200/40 | | 5/5/0.5 | |
| 7/92 | 0.1 | U | 0.15 | U | 0.15 | U | 0.45 | U | 0.6 | B |
| 02/08/94 | 0.1 | | 0.1 | ND | 0.1 | ND | 0.4 | | 0.4 | |
| 03/28/94 | 0.1 | ND | 0.1 | ND | 0.1 | ND | 0.1 | ND | 0.18 | ND |
| 06/06/94 | 0.1 | ND | 0.1 | ND | 0.1 | ND | 0.1 | ND | 0.18 | ND |
| 08/23/94 | 0.1 | ND | 0.1 | ND | 0.1 | ND | 0.1 | ND | 0.18 | ND |
| 10/27/94 | 0.1 | ND | 0.1 | ND | 0.1 | ND | 0.1 | ND | 0.18 | ND |
| 01/19/95 | 0.1 | ND | 0.1 | ND | 0.1 | ND | 0.1 | ND | 0.18 | ND |
| 04/19/95 | 0.1 | ND | 0.1 | ND | 0.1 | ND | 0.1 | ND | 0.18 | ND |
| 07/18/95 | 0.1 | ND | 0.1 | ND | 0.1 | ND | 0.1 | ND | 0.18 | ND |
| 10/09/95 | 0.1 | ND | 0.1 | ND | 0.1 | ND | 0.1 | ND | 0.18 | ND |
| 01/08/96 | 0.1 | ND | 0.1 | ND | 0.1 | ND | 0.1 | ND | 0.18 | ND |
| 04/17/96 | 0.1 | ND | 0.1 | ND | 0.1 | ND | 0.1 | ND | 0.18 | ND |
| 07/09/96 | 0.1 | ND | 0.1 | ND | 0.1 | ND | 0.1 | ND | 0.19 | |
| 10/02/96 | 0.1 | ND | 0.1 | ND | 0.1 | ND | 0.1 | ND | 0.2 | |
| 04/01/97 | 0.1 | ND | 0.1 | ND | 0.1 | ND | 0.1 | ND | 0.18 | ND |
| 05/21/97 | 0.1 | ND | 0.1 | ND | 0.1 | ND | 0.1 | ND | 0.18 | ND |
| 07/22/97 | 0.1 | ND | 0.1 | ND | 0.1 | ND | 0.1 | ND | 0.18 | ND |
| 10/23/97 | 0.2 | U | 0.25 | U | 0.3 | U | 0.35 | U | 0.2 | U |
| 01/28/98 | 0.1 | U | 0.1 | U | 0.1 | U | 0.1 | U | 0.18 | U |
| 04/22/98 | 0.1 | U | 0.1 | U | 0.1 | U | 0.1 | U | 0.18 | U |
| 07/20/98 | 0.1 | U | 0.1 | U | 0.1 | U | 0.1 | U | 0.18 | U |
| 10/27/98 | 0.1 | U | 0.1 | U | 0.1 | U | 0.1 | U | 0.18 | U |
| 01/19/99 | 0.1 | U | 0.1 | U | 0.1 | U | 0.1 | U | 0.18 | U |
| 04/13/99 | 0.1 | U | 0.1 | U | 0.1 | U | 0.1 | U | 0.18 | U |
| 07/28/99 | 0.05 | U | 0.075 | U | 0.075 | U | 0.1 | U | 0.2 | U |
| 10/06/99 | 0.075 | U | 0.075 | U | 0.075 | U | 0.075 | U | 0.177 | J |
| 02/01/00 | 0.075 | U | 0.075 | U | 0.075 | U CSL | 0.075 | U | 0.2 | U |
| 06/06/00 | 0.075 | U | 0.075 | U, CSH | 0.075 | U | 0.075 | U | 0.2 | U |
| 07/18/00 | 0.075 | U | 0.075 | U | 0.075 | U | 0.075 | U | 0.2 | U |
| 10/13/00 | 0.075 | U | 0.075 | U | 0.075 | U | 0.075 | U | 0.197 | J |
| 01/24/01 | 0.075 | U | 0.075 | U | 0.075 | U | 0.075 | U, SPH | 0.2 | U, SPH |
| 05/09/01 | 0.075 | U | 0.075 | U | 0.075 | U | 0.075 | U | 0.2 | U |
| 07/17/01 | 0.19 | U | 0.19 | U | 0.13 | U | 0.1 | U | 0.13 | U |
| 10/18/01 | 0.19 | U | 0.19 | U | 0.13 | U | 0.1 | U | 0.13 | U |
| 01/09/02 | 0.19 | U | 0.19 | U | 0.13 | U | 0.1 | U | 0.13 | U |
| 04/22/02 | 0.18 | U | 0.195 | U | 0.16 | U | 0.21 | U | 0.18 | U |
| 07/09/02 | 0.18 | U | 0.195 | U | 0.16 | U | 0.21 | U | 0.18 | U |
| 10/22/02 | 0.18 | U | 0.195 | U | 0.16 | U | 0.21 | U | 0.18 | U |
| 01/07/03 | 0.18 | U | 0.195 | U | 0.16 | U | 0.21 | U | 0.18 | U |
| 07/22/03 | 0.18 | U | 0.195 | U | 0.16 | U | 0.21 | U | 0.18 | U |
| 07/14/04 | 0.25 | U | 0.25 | U | 0.225 | U | 0.21 | U | 0.25 | U |
| 07/12/05 | 0.25 | U | 0.25 | U | 0.225 | U | 0.21 | U | 0.25 | U |
| 07/24/06 | 0.25 | U | 0.25 | U | 0.355 | U | 0.21 | U | 0.25 | U |

ANALYTICAL RESULTS FROM PLUME 1/2 MONITORING WELLS

| Date | MW-69B | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1, 1 - DCA | | 1, 1 - DCE | | PCE | | 1, 1, 1 - TCA | | TCE | |
| MCL/ES/PAL Limitations | None/850/85 | | 7/7/0.7 | | 5/5/0.5 | | 200/200/40 | | 5/5/0.5 | |
| 7/92 | 0.1 | U | 0.15 | U | 0.15 | U | 0.6 | J | 0.3 | |
| 02/08/94 | 0.3 | | 0.1 | ND | 0.1 | ND | 0.6 | | 0.4 | |
| 03/28/94 | 0.1 | ND | 0.1 | ND | 0.1 | ND | 1 | | 0.18 | ND |
| 06/06/94 | 0.1 | ND | 0.1 | ND | 0.1 | ND | 2.2 | | 0.18 | ND |
| 08/23/94 | 0.1 | ND | 0.1 | ND | 0.1 | ND | 1 | | 0.18 | ND |
| 10/27/94 | 0.1 | ND | 0.1 | ND | 0.1 | ND | 1.1 | | 0.18 | ND |
| 01/19/95 | 0.1 | ND | 0.1 | ND | 0.1 | ND | 2 | | 0.18 | ND |
| 04/19/95 | 0.1 | ND | 0.1 | ND | 0.1 | ND | 0.1 | ND | 0.18 | ND |
| 07/18/95 | 0.1 | ND | 0.1 | ND | 0.1 | ND | 0.1 | ND | 0.18 | ND |
| 10/09/95 | 0.1 | ND | 0.1 | ND | 0.1 | ND | 0.1 | ND | 0.18 | ND |
| 01/08/96 | 0.1 | ND | 0.1 | ND | 0.1 | ND | 0.1 | ND | 0.18 | ND |
| 04/17/96 | 0.1 | ND | 0.1 | ND | 0.1 | ND | 0.31 | | 0.35 | |
| 07/09/96 | 0.1 | ND | 0.1 | ND | 0.1 | ND | 0.1 | ND | 0.18 | ND |
| 10/02/96 | 0.1 | ND | 0.1 | ND | 0.1 | ND | 0.1 | ND | 0.18 | ND |
| 04/01/97 | 0.1 | ND | 0.1 | ND | 0.1 | ND | 0.149 | | 0.23 | |
| 05/21/97 | 0.1 | ND | 0.1 | ND | 0.1 | ND | 0.1 | ND | 0.18 | ND |
| 07/22/97 | 0.1 | ND | 0.1 | ND | 0.1 | ND | 0.1 | ND | 0.18 | ND |
| 10/23/97 | 0.2 | U | 0.25 | U | 0.3 | U | 0.35 | U | 0.2 | U |
| 01/28/98 | 0.1 | U | 0.1 | U | 0.1 | U | 0.1 | U | 0.18 | U |
| 04/22/98 | 0.1 | U | 0.1 | U | 0.1 | U | 0.1 | U | 0.18 | U |
| 07/20/98 | 0.1 | U | 0.1 | U | 0.1 | U | 0.1 | U | 0.18 | U |
| 10/27/98 | 0.1 | U | 0.1 | U | 0.1 | U | 0.1 | U | 0.18 | U |
| 01/19/99 | 0.1 | U | 0.1 | U | 0.1 | U | 0.1 | U | 0.18 | U |
| 04/13/99 | 0.1 | U | 0.1 | U | 0.1 | U | 0.1 | U | 0.18 | U |
| 07/28/99 | 0.05 | U | 0.075 | U | 0.075 | U | 0.1 | U | 0.2 | U |
| 10/06/99 | 0.075 | U | 0.075 | U | 0.075 | U | 0.075 | U | 0.05 | U |
| 02/01/00 | 0.075 | U | 0.075 | U | 0.075 | U, CSL | 0.075 | U | 0.2 | U |
| 06/06/00 | 0.075 | U | 0.075 | 0.15 U, CSH | 0.075 | U | 0.075 | U | 0.2 | U |
| 07/18/00 | 0.075 | U | 0.075 | U | 0.075 | U | 0.213 | J | 0.2 | U |
| 10/13/00 | 0.075 | U | 0.075 | U | 0.075 | U | 0.045 | U | 0.211 | J |
| 01/24/01 | 0.075 | U | 0.075 | U | 0.075 | U | 0.075 | U, SPH | 0.2 | U, SPH |
| 05/09/01 | 0.075 | U | 0.075 | U | 0.075 | U | 0.075 | U | 0.2 | U |
| 07/17/01 | 0.19 | U | 0.19 | U | 0.13 | U | 0.1 | U | 0.13 | U |
| 10/18/01 | 0.19 | U | 0.19 | U | 0.13 | U | 0.1 | U | 0.13 | U |
| 01/09/02 | 0.19 | U | 0.19 | U | 0.13 | U | 0.1 | U | 0.13 | U |
| 04/22/02 | 0.18 | U | 0.195 | U | 0.16 | U | 0.21 | U | 0.18 | U |
| 07/09/02 | 0.18 | U | 0.195 | U | 0.16 | U | 0.21 | U | 0.18 | U |
| 10/22/02 | 0.18 | U | 0.195 | U | 0.16 | U | 0.21 | U | 0.18 | U |
| 01/07/03 | 0.18 | U | 0.195 | U | 0.16 | U | 0.21 | U | 0.18 | U |
| 07/22/03 | 0.18 | U | 0.195 | U | 0.16 | U | 0.21 | U | 0.18 | U |
| 07/14/04 | 0.25 | U | 0.25 | U | 0.225 | U | 0.21 | U | 0.25 | U |
| 10/19/04 | 0.25 | U | 0.25 | U | 0.225 | U | 0.21 | U | 0.25 | U |
| 07/12/05 | 0.25 | U | 0.25 | U | 0.225 | U | 0.21 | U | 0.25 | U |
| 07/25/06 | 0.25 | U | 0.25 | U | 0.355 | U | 0.21 | U | 0.25 | U |

ANALYTICAL RESULTS FROM PLUME 1/2 MONITORING WELLS

| Date | MW-70A | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1, 1 - DCA | | 1, 1 - DCE | | PCE | | 1, 1, 1 - TCA | | TCE | |
| MCL/ES/PAL Limitations | None/850/85 | | 7/7/0.7 | | 5/5/0.5 | | 200/200/40 | | 5/5/0.5 | |
| 7/92 | 4 | | 0.15 | U | **0.6** | | 8 | | **43** | |
| 02/08/94 | 2 | | 0.05 | | 0.4 | | 5 | | **36** | |
| 03/28/94 | 3.9 | | | ND | **1.3** | | 8.2 | | **49** | |
| 06/06/94 | 2.5 | | 0.1 | ND | 0.1 | ND | 3.4 | | **14** | |
| 08/23/94 | 0.1 | ND | 0.1 | ND | 0.1 | ND | 1.2 | | **6.8** | |
| 10/27/94 | 0.1 | ND | 0.1 | ND | 0.1 | ND | 1 | | **7.1** | |
| 01/19/95 | 0.1 | ND | 0.1 | ND | 0.1 | ND | 1.1 | | **6.9** | |
| 04/19/95 | 3.7 | | 0.1 | ND | **1** | | 7.7 | | **49** | |
| 07/18/95 | 5.5 | | 0.1 | ND | **1.2** | | 12 | | **50** | |
| 10/09/95 | 8.6 | | 0.1 | ND | **1.3** | | 15 | | **41** | |
| 01/08/96 | 5.7 | | 0.1 | ND | 0.1 | ND | 10 | | **57** | |
| 04/17/96 | 18.1 | | 0.1 | ND | **1.6** | | 29 | | **139** | |
| 07/09/96 | 10 | | 0.1 | ND | 0.1 | ND | 16 | | **43** | |
| 10/02/96 | 12 | | 0.1 | ND | **1.9** | | 20 | | **61** | |
| 04/01/97 | 0.1 | ND | | ND | 0.1 | ND | 7.5 | | **33.3** | |
| 05/21/97 | 0.1 | ND | **13** | | **1.92** | | 19.5 | | **76.9** | |
| 07/21/97 | 9.02 | | 0.1 | ND | 0.1 | ND | 13.9 | | **60.5** | |
| 10/22/97 | 9.8 | | 0.25 | U | **1.04** | | 15.5 | | **36.7** | |
| 01/27/98 | 1.03 | | 0.1 | U | 0.1 | U | 1.44 | | **3.46** | |
| 04/21/98 | 8.35 | | 0.1 | U | **0.815** | | 12.8 | | **22.5** | |
| 07/21/98 | 2.54 | | 0.1 | U | **0.612** | | 3.96 | | **19.4** | |
| 10/27/98 | 13 | | 0.1 | U | **1.27** | | 15.7 | | **9.02** | |
| 01/18/99 | 10 | | 0.1 | U | **1.3** | | 12 | | **10.6** | |
| 04/12/99 | 6.32 | | 0.1 | U | **1.05** | | 6.67 | | **23.7** | CSH |
| 07/27/99 | 5.69 | | 0.075 | U | **1.05** | | 6.99 | | **17.4** | |
| 10/06/99 | 4.81 | | 0.075 | U | **0.994** | | 6.47 | | **26.4** | Dup, SPL |
| 02/02/00 | 2.28 | | 0.075 | U | **0.648** | CSL | 2.67 | | **21.2** | |
| 06/07/00 | 0.922 | | 0.075 | U | 0.33 | J | 1.2 | | **10.8** | |
| 07/18/00 | 0.655 | | 0.075 | U | 0.381 | J | 0.881 | | **21.0** | |
| 10/11/00 | 0.849 | CSH, SPH | 0.075 | U | **0.59** | | 1.24 | | **25.2** | |
| 01/24/01 | 0.822 | | 0.075 | U | **0.597** | | 1.23 | SPH | **26.7** | SPH |
| 05/08/01 | 1.13 | | 0.075 | U | **0.803** | | 1.95 | | **35.2** | |
| 07/17/01 | 1.52 | | 0.19 | U | **1.26** | | 2.3 | | **53.1** | |
| 10/16/01 | 0.95 | U | 0.95 | U | 0.65 | U | 0.5 | U | **56.5** | |
| 01/09/02 | 0.95 | U | 0.95 | U | 0.65 | U | 0.5 | U | **75.7** | |
| 04/22/02 | 0.9 | U | 0.975 | U | 0.8 | U | 2.25 | | **72.5** | |
| 07/09/02 | 0.9 | U | 0.975 | U | 0.8 | U | 1.05 | U | **58.6** | |
| 10/23/02 | 0.9 | U | 0.975 | U | **1.68** | D | 1.05 | U | **98.1** | |
| 01/07/03 | 0.9 | U | 0.975 | U | 0.8 | U | 1.05 | U | **51.2** | |
| 04/09/03 | 0.18 | U | 0.195 | U | 0.16 | U | 0.21 | U | **6.06** | |
| 07/22/03 | 0.18 | U | 0.195 | U, CSL | 0.16 | U | 0.21 | U | **4.41** | |
| 10/07/03 | 1.33 | | 0.195 | U | **0.772** | J | 2.44 | | **28.1** | |
| 02/24/04 | 0.777 | J | 0.25 | U | 0.225 | U | 1.13 | J | **6.39** | |
| 03/16/04 | 0.74 | J | 0.25 | U | 0.225 | U | 1.15 | J | **7.29** | |
| 04/13/04 | 0.847 | J | 0.25 | U | 0.225 | U | 1.17 | J | **4.72** | |
| 05/24/04 | 0.807 | J | 0.25 | U | 0.225 | U | 0.879 | J | **5.36** | |
| 06/22/04 | 0.846 | J | 0.25 | U | 0.225 | U | 0.763 | J | **4.70** | |

ANALYTICAL RESULTS FROM PLUME 1/2 MONITORING WELLS

| Date | MW-70A K8 | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1, 1 - DCA | | 1, 1 - DCE | | PCE | | 1, 1, 1 - TCA | | TCE | |
| MCL/ES/PAL Limitations | None/850/85 | | 7/7/0.7 | | 5/5/0.5 | | 200/200/40 | | 5/5/0.5 | |
| 07/14/04 | 1.27 | J | 0.25 | U | 0.225 | U | 1.08 | J | **5.52** | |
| 10/19/04 | 1.10 | J | 0.25 | U | 0.225 | U | 0.21 | U | **4.33** | |
| 01/18/05 | 1.20 | J | 0.25 | U | 0.225 | U | 0.751 | J | **2.97** | |
| 04/13/05 | 1.14 | J | 0.25 | U | 0.463 | J | 0.813 | J | **1.44** | J |
| 07/12/05 | 1.03 | J | 0.25 | U | 0.453 | J | 0.661 | J | **1.28** | J |
| 10/10/05 | 0.704 | J | 0.25 | U | 0.225 | U | 0.52 | J | **0.689** | J |
| 04/17/06 | 0.881 | J | 0.25 | U | 0.225 | U | 0.21 | U | **1.12** | J |
| 07/24/06 | 0.25 | U | 0.25 | U | 0.355 | U | 0.51 | J | 0.25 | U |
| 10/18/06 | 0.23 | J | 0.075 | U | 0.13 | J | 0.24 | J | 0.40 | J |

ANALYTICAL RESULTS FROM PLUME 1/2 MONITORING WELLS

| Date | MW-70B | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1, 1 - DCA | | 1, 1 - DCE | | PCE | | 1, 1, 1 - TCA | | TCE | |
| MCL/ES/PAL Limitations | None/850/85 | | 7/7/0.7 | | 5/5/0.5 | | 200/200/40 | | 5/5/0.5 | |
| 7/92 | 0.1 | U | 0.15 | U | 0.15 | U | 1 | | **1** | |
| 02/08/94 | 0.07 | | 0.1 | ND | 0.02 | | 0.1 | | **1** | |
| 03/28/94 | 0.1 | ND | 0.1 | ND | 0.1 | ND | 1 | | **2.8** | |
| 06/06/94 | 0.1 | ND | 0.1 | ND | 0.1 | ND | 0.1 | ND | 0.18 | ND |
| 08/23/94 | 0.1 | ND | 0.1 | ND | 0.1 | ND | 0.1 | ND | 0.18 | ND |
| 10/27/94 | 0.1 | ND | 0.1 | ND | 0.1 | ND | 0.1 | ND | 0.18 | ND |
| 01/19/95 | 0.1 | ND | 0.1 | ND | 0.1 | ND | 0.1 | ND | 0.18 | ND |
| 04/19/95 | 0.1 | ND | 0.1 | ND | 0.1 | ND | 0.1 | ND | 0.18 | ND |
| 07/18/95 | 0.1 | ND | 0.1 | ND | 0.1 | ND | 0.1 | ND | **1.8** | |
| 10/09/95 | 1.4 | | 0.1 | ND | 0.1 | ND | 3 | | **3.9** | |
| 01/08/96 | 0.1 | ND | 0.1 | ND | 0.1 | ND | 1.1 | | **4.5** | |
| 04/17/96 | 2.6 | | 0.1 | ND | 0.1 | ND | 4.2 | | **13** | |
| 07/09/96 | 2 | | 0.1 | ND | 0.1 | ND | 3.2 | | **4.1** | |
| 10/02/96 | 1.9 | | 0.1 | ND | 0.1 | ND | 3.1 | | **1.9** | |
| 04/01/97 | 2.51 | | 0.1 | ND | 0.1 | ND | 3.7 | | **7.53** | |
| 05/21/97 | 0.1 | ND | **4.48** | | 0.1 | ND | 6.79 | | **6.23** | |
| 07/21/97 | 5.21 | | 0.1 | ND | 0.29 | | 7.59 | | **6.7** | |
| 10/22/97 | 3.75 | | 0.25 | U | 0.3 | U | 5.2 | | **11.1** | |
| 01/27/98 | 13.1 | | 0.1 | U | **1.54** | | 18.6 | | **39.7** | |
| 04/21/98 | 4.93 | | 0.1 | U | 0.374 | | 7.36 | | **8.06** | |
| 07/21/98 | 0.856 | | 0.1 | U | 0.1 | U | 1.43 | | **1.79** | |
| 10/27/98 | 2.33 | | 0.1 | U | 0.321 | | 3.03 | | **1.9** | |
| 01/18/99 | 2.94 | | 0.1 | U | 0.485 | J | 3.44 | | **2.13** | |
| 04/12/99 | 3.69 | | 0.1 | U | 0.45 | J | 3.88 | | **2.24** | **CSH** |
| 07/27/99 | 1.82 | | 0.075 | U | 0.344 | J | 2 | | **3.43** | |
| 10/06/99 | 2 | | 0.075 | U | 0.379 | | 2.48 | | **8.33** | **Dup, SPL** |
| 02/02/00 | 0.535 | | 0.075 | U | 0.075 | U | 1.69 | | **6.51** | **CSH, Dup** |
| 06/07/00 | 0.386 | J | 0.075 | U | 0.075 | U | 0.416 | J | **4.32** | |
| 07/18/00 | 0.075 | U | 0.075 | U | 0.075 | U | 0.152 | J | **1.47** | |
| 10/11/00 | 0.525 | | 0.075 | U | 0.209 | J | 0.881 | | **5.8** | |
| 01/24/01 | 0.446 | J | 0.075 | U | 0.184 | J | 0.581 | SPH | **11.2** | SPH |
| 05/08/01 | 0.16 | J | 0.075 | U | 0.197 | J | 0.224 | J | **5.36** | |
| 07/17/01 | 0.789 | J | 0.19 | U | 0.452 | J | 1.08 | | **24.3** | |
| 10/16/01 | 0.19 | U | 0.19 | U | 0.458 | J | 0.403 | J | **32** | |
| 01/09/02 | 0.19 | U | 0.19 | U | 0.13 | U | 0.1 | U | **7.88** | |
| 04/22/02 | 0.378 | J | 0.195 | U | 0.16 | U | 0.595 | J | **8.9** | |
| 07/09/02 | 0.18 | U | 0.195 | U | 0.16 | U | 0.21 | U | **3.94** | |
| 10/23/02 | 0.413 | J | 0.195 | U | 0.381 | J, Dup | 0.691 | J, Dup | **10.1** | Dup |
| 01/07/03 | 0.18 | U | 0.195 | U | 0.16 | U | 0.21 | U | **10.2** | |
| 04/09/03 | 0.18 | U | 0.195 | U | 0.16 | U | 0.21 | U | 0.18 | U |
| 07/22/03 | 0.18 | U | 0.195 | U, CSL | 0.16 | U | 0.21 | U | 0.18 | U |
| 10/07/03 | 0.18 | U | 0.195 | U | 0.16 | U | 0.546 | J | 0.453 | J |
| 02/24/04 | 0.25 | U | 0.25 | U | 0.225 | U | 0.21 | U | 0.25 | U |
| 03/16/04 | 0.25 | U | 0.25 | U | 0.225 | U | 0.21 | U | 0.25 | U |
| 04/13/04 | 0.25 | U | 0.25 | U | 0.225 | U | 0.21 | U | 0.25 | U |
| 05/24/04 | 0.25 | U | 0.25 | U | 0.225 | U | 0.21 | U | 0.25 | U |
| 06/22/04 | 0.25 | U | 0.25 | U | 0.225 | U | 0.21 | U | 0.25 | U |

ANALYTICAL RESULTS FROM PLUME 1/2 MONITORING WELLS

| Date | MW-70B | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1, 1 - DCA | | 1, 1 - DCE | | PCE | | 1, 1, 1 - TCA | | TCE | |
| MCL/ES/PAL Limitations | None/850/85 | | 7/7/0.7 | | 5/5/0.5 | | 200/200/40 | | 5/5/0.5 | |
| 07/14/04 | 0.25 | U | 0.25 | U | 0.225 | U | 0.21 | U | 0.25 | U |
| 10/19/04 | 0.25 | U | 0.25 | U | 0.225 | U | 0.21 | U | 0.25 | U |
| 01/18/05 | 0.25 | U | 0.25 | U | 0.225 | U | 0.21 | U | 0.25 | U |
| 04/13/05 | 0.25 | U | 0.25 | U | 0.225 | U | 0.21 | U | 0.25 | U |
| 10/10/05 | 0.25 | U | 0.25 | U | 0.225 | U | 0.21 | U | 0.25 | U |
| 04/17/06 | 0.25 | U | 0.25 | U | 0.225 | U | 0.21 | U | 0.25 | U |
| 10/17/06 | 0.075 | U | 0.075 | U | 0.05 | U | 0.10 | U | 0.10 | U |

ANALYTICAL RESULTS FROM PLUME 1/2 MONITORING WELLS

| Date | MW-74A | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1, 1 - DCA | | 1, 1 - DCE | | PCE | | 1, 1, 1 - TCA | | TCE | |
| MCL/ES/PAL Limitations | None/850/85 | | 7/7/0.7 | | 5/5/0.5 | | 200/200/40 | | 5/5/0.5 | |
| 07/22/03 | 0.18 | U | 0.195 | U | 0.16 | U | 0.21 | U | 0.18 | U |
| 10/07/03 | 0.18 | U | 0.195 | U | 0.16 | U | 0.21 | U | 0.18 | U |
| 02/24/04 | 0.25 | U | 0.25 | U | 0.225 | U | 0.21 | U | 0.25 | U |
| 03/16/04 | 0.25 | U | 0.25 | U | 0.225 | U | 0.21 | U | 0.25 | U |
| 04/13/04 | 0.25 | U | 0.25 | U | 0.225 | U | 0.21 | U | 0.25 | U |
| 05/24/04 | 0.25 | U | 0.25 | U | 0.225 | U | 0.21 | U | 0.25 | U |
| 06/22/04 | 0.25 | U | 0.25 | U | 0.225 | U | 0.21 | U | 0.25 | U |
| 07/14/04 | 0.25 | U | 0.25 | U | 0.225 | U | 0.21 | U | 0.25 | U |
| 10/19/04 | 0.25 | U | 0.25 | U | 0.225 | U | 0.21 | U | 0.25 | U |
| 01/18/05 | 0.25 | U | 0.25 | U | 0.225 | U | 0.21 | U | 0.25 | U |
| 04/11/05 | 0.25 | U | 0.25 | U | 0.225 | U | 0.21 | U | 0.25 | U |
| 10/10/05 | 0.25 | U | 0.25 | U | 0.225 | U | 0.21 | U | 0.25 | U |
| 04/18/06 | 0.25 | U | 0.25 | U | 0.225 | U | 0.21 | U | 0.25 | U |
| 10/18/06 | 0.075 | U | 0.075 | U | 0.05 | U | 0.10 | U | 0.23 | J |

ANALYTICAL RESULTS FROM PLUME 1/2 MONITORING WELLS

| Date | MW-74B | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1, 1 - DCA | | 1, 1 - DCE | | PCE | | 1, 1, 1 - TCA | | TCE | |
| MCL/ES/PAL Limitations | None/850/85 | | 7/7/0.7 | | 5/5/0.5 | | 200/200/40 | | 5/5/0.5 | |
| 07/22/03 | 0.18 | U | 0.195 | U | 0.16 | U | 0.21 | U | 0.18 | U |
| 10/07/03 | 0.18 | U | 0.195 | U | 0.16 | U | 0.21 | U | 0.18 | U |
| 02/24/04 | 0.25 | U | 0.25 | U | 0.225 | U | 0.21 | U | 0.25 | U |
| 03/16/04 | 0.25 | U | 0.25 | U | 0.225 | U | 0.21 | U | 0.25 | U |
| 04/13/04 | 0.25 | U | 0.25 | U | 0.225 | U | 0.21 | U | 0.25 | U |
| 05/24/04 | 0.25 | U | 0.25 | U | 0.225 | U | 0.21 | U | 0.25 | U |
| 06/22/04 | 0.25 | U | 0.25 | U | 0.225 | U | 0.21 | U | 0.25 | U |
| 07/14/04 | 0.25 | U | 0.25 | U | 0.225 | U | 0.21 | U | 0.25 | U |
| 10/19/04 | 0.25 | U | 0.25 | U | 0.225 | U | 0.21 | U | 0.25 | U |
| 01/18/05 | 0.25 | U | 0.25 | U | 0.225 | U | 0.21 | U | 0.25 | U |
| 04/14/05 | 0.25 | U | 0.25 | U | 0.225 | U | 0.21 | U | 0.25 | U |
| 10/10/05 | 0.25 | U | 0.25 | U | 0.225 | U | 0.21 | U | 0.25 | U |
| 04/17/06 | 0.25 | U | 0.25 | U | 0.225 | U | 0.21 | U | 0.25 | U |
| 10/17/06 | 0.075 | U | 0.075 | U | 0.05 | U | 0.10 | U | 0.10 | U |

ANALYTICAL RESULTS FROM PLUME 1/2 MONITORING WELLS

| Date | MW-75 | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1, 1 - DCA | | 1, 1 - DCE | | PCE | | 1, 1, 1 - TCA | | TCE | |
| MCL/ES/PAL Limitations | None/850/85 | | 7/7/0.7 | | 5/5/0.5 | | 200/200/40 | | 5/5/0.5 | |
| 07/22/03 | 2.94 | | 0.195 | U | **0.552** | J | 2.4 | | 0.18 | U |
| 10/07/03 | 3.32 | | 0.195 | U | **0.682** | J | 2.9 | | 0.18 | U |
| 02/24/04 | 2.84 | | 0.25 | U | **0.601** | J | 2.65 | | 0.25 | U |
| 03/16/04 | 2.84 | | 0.125 | U | 0.495 | J | 2.42 | | 0.25 | U |
| 04/13/04 | 5.37 | | 0.25 | U | **0.921** | J | 3.95 | | 0.25 | U |
| 05/24/04 | 7.66 | | 0.25 | U | **1.27** | J | 5.36 | | 0.25 | U |
| 06/22/04 | 5.95 | | 0.25 | U | **0.964** | J | 4.28 | | 0.25 | U |
| 07/14/04 | 7.86 | | 0.25 | U | **1.40** | J | 5.91 | | 0.25 | U |
| 10/20/04 | 3.13 | | 0.25 | U | **0.607** | J | 1.87 | | 0.25 | U |
| 01/18/05 | 2.18 | | 0.25 | U | 0.497 | J | 1.45 | | 0.25 | U |
| 04/11/05 | 1.46 | J | 0.25 | U | **0.526** | J | 1.07 | J | 0.25 | U |
| 10/10/05 | 0.85 | J | 0.25 | U | 0.225 | | 0.793 | J | 0.25 | U |
| 04/18/06 | 1.31 | J | 0.25 | U | 0.225 | | 0.21 | U | 0.25 | U |
| 10/17/06 | 0.91 | | 0.075 | U | 0.29 | J | 0.10 | U | 0.10 | U |

**Gannett Fleming**

ANALYTICAL RESULTS FROM PLUME 1/2 MONITORING WELLS

| Date | EC-1 | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1, 1 - DCA | | 1, 1 - DCE | | PCE | | 1, 1, 1 - TCA | | TCE | |
| MCL/ES/PAL Limitations | None/850/85 | | 7/7/0.7 | | 5/5/0.5 | | 200/200/40 | | 5/5/0.5 | |
| 10/15/85 | | NA | | NA | | NA | | NA | **11** | |
| 12/18/91 | 2 | | **0.9** | | 0.2 | J | 21 | | **7** | |
| 06/15/92 | | NA | | NA | | NA | | NA | **7** | |
| 06/20/92 | | NA | | NA | | NA | | NA | **7** | |
| 05/11/95 | 0.25 | U | 0.25 | U | 0.35 | U | 0.4 | U | 0.3 | U |
| 06/15/95 | | NA | | NA | | NA | | NA | **5** | |
| 04/30/96 | 1.6 | | 0.2 | U | 0.2 | U | 0.2 | U | **1.4** | |
| 10/04/96 | 1.5 | | 0.15 | U | 0.1 | U | 0.1 | U | **1.5** | |
| 05/05/97 | 1.4 | | 0.15 | U | 0.1 | U | 0.4 | | **1.2** | |
| 10/09/97 | 1.4 | | 0.3 | | 0.2 | | 1 | | **2.2** | |
| 05/01/98 | 1.1 | | 0.15 | U | 0.1 | U | 0.5 | | **4.5** | |
| 11/06/98 | 1.2 | | 0.25 | U | 0.35 | U | 0.3 | U | **1.8** | |
| 04/20/99 | 0.93 | | 0.1 | U | 0.1 | U | 0.355 | J | **1.58** | CSH |
| 05/20/99 | 0.8 | | 0.25 | U | 0.35 | U | 0.35 | U | **1.2** | |
| 09/13/99 | 1.4 | | 0.25 | U | 0.35 | U | 0.35 | U | **1.2** | |
| 10/08/99 | 1.47 | | 0.075 | U | 0.075 | U | 0.982 | | **3.07** | |
| 05/23/00 | 0.356 | J, ISH | 0.075 | U, ISH | 0.178 | J, ISH | 0.075 | U, ISH | **0.59** | J, ISH |
| 10/13/00 | 0.213 | J | 0.075 | U | 0.075 | U | 0.301 | J | **1.27** | |
| 05/10/01 | 0.379 | J | 0.075 | U | 0.075 | U | 1.3 | | **2.72** | |
| 10/17/01 | 0.19 | U | 0.19 | U | 0.13 | U | 0.1 | U | 0.13 | U |
| 04/22/02 | 0.518 | J | 0.195 | U | 0.16 | U | 1.58 | | **3.21** | |
| 11/18/02 | 0.18 | U | 0.195 | U | 0.16 | U | 0.872 | J | **2.43** | |
| 04/10/03 | 0.18 | U | 0.195 | U | 0.16 | U | 0.21 | U | **2.86** | |
| 07/23/03 | 0.18 | U | 0.195 | U | 0.16 | U | 0.639 | J | **2.68** | |
| 10/08/03 | 0.18 | U | 0.195 | U | 0.16 | U | 0.879 | J | **2.62** | |
| 02/25/04 | 0.25 | U | 0.25 | U | 0.225 | U | 0.955 | J | **2.76** | |
| 04/14/04 | 0.25 | U | 0.25 | U | 0.225 | U | 0.992 | J | **3.11** | |
| 07/13/04 | 0.25 | U | 0.25 | U | 0.225 | U | 0.958 | J | **3.08** | |
| 10/20/04 | 0.25 | U | 0.25 | U | 0.225 | U | 0.949 | J | **3.40** | |
| 01/18/05 | 0.25 | U | 0.25 | U | 0.225 | U | 0.601 | J | **3.00** | |
| 04/12/05 | 0.25 | U | 0.25 | U | 0.225 | U | 0.704 | J | **3.12** | |
| 07/13/05 | 0.25 | U | 0.25 | U | 0.225 | U | 0.625 | J | **3.37** | |
| 10/12/05 | 0.25 | U | 0.25 | U | 0.225 | U | 0.666 | J | **3.38** | |
| 04/19/06 | 0.25 | U | 0.25 | U | 0.225 | U | 1.03 | J | **3.49** | |
| 07/26/06 | 0.25 | U | 0.25 | U | 0.355 | U | 0.82 | J | **2.97** | |
| 10/18/06 | 0.075 | U, CSL | 0.075 | U | 0.05 | U | 0.77 | | **2.88** | |

ANALYTICAL RESULTS FROM PLUME 1/2 MONITORING WELLS

| Date | EC-2 | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1, 1 - DCA | | 1, 1 - DCE | | PCE | | 1, 1, 1 - TCA | | TCE | |
| MCL/ES/PAL Limitations | None/850/85 | | 7/7/0.7 | | 5/5/0.5 | | 200/200/40 | | 5/5/0.5 | |
| 10/15/85 | | NA | | NA | | NA | | NA | **13** | |
| 12/19/91 | 2 | | **0.9** | | 0.3 | | 19 | | **8** | |
| 06/15/92 | | NA | | NA | | NA | | NA | **8** | |
| 06/20/92 | | NA | | NA | | NA | | NA | **8** | |
| 05/11/95 | 3 | | **0.9** | | **1.8** | | 9.9 | | **5.6** | |
| 06/15/95 | | NA | | NA | | NA | | NA | **5** | |
| 04/30/96 | 1.4 | | 0.4 | | **0.5** | | 7.8 | | **4.6** | |
| *10/04/96* | *1.3* | | *0.15* | *U* | *0.1* | *U* | *9.4* | | **5.4** | |
| 05/05/97 | 1.3 | | 0.15 | U | 0.1 | U | 7.6 | | **5** | |
| 10/09/97 | 1.2 | | 0.7 | | 0.4 | | 8.5 | | **5.4** | |
| 05/01/98 | 1.2 | | 0.5 | | 0.3 | | 8.4 | | **8** | |
| 11/06/98 | 1.2 | | 0.25 | 0.5 U | 0.35 | U | 5.9 | | **5.2** | |
| 04/20/99 | 0.947 | | 0.285 | J | 0.235 | J | 6.03 | | **5.08** | CSH |
| 05/20/99 | 1 | | 0.25 | U | 0.35 | U | 6.8 | | **4.9** | |
| *09/13/99* | *1.3* | | *0.25* | *U* | *0.35* | *U* | *5.3* | | **4** | |
| 10/08/99 | 1.18 | | 0.296 | J | 0.199 | J | 5.54 | | **5.4** | |
| 05/24/00 | 0.819 | | 0.203 | J | 0.188 | J | 3.28 | | **4.43** | |
| 10/13/00 | 0.782 | | 0.165 | | 0.225 | J | 3.74 | | **5.03** | |
| 05/10/01 | 0.216 | J | 0.075 | U | 0.16 | J | 1.53 | | **3.05** | |
| 10/17/01 | 0.19 | U | 0.19 | U | 0.13 | U | 0.878 | | **3.4** | |
| 04/22/02 | 0.18 | U | 0.195 | U | 0.16 | U | 1.49 | | **4.02** | |
| 11/18/02 | 0.18 | U | 0.195 | U | 0.16 | U | 0.965 | J | **2.82** | |
| 04/10/03 | 0.18 | U | 0.195 | U | 0.16 | U | 0.21 | U | **2.82** | |
| 07/23/03 | 0.18 | U | 0.195 | U | 0.16 | U | 0.21 | U | **2.31** | |
| 10/07/03 | 0.578 | J | 0.195 | U | 0.16 | U | 1.54 | | **3.62** | |
| 02/25/04 | 0.25 | U | 0.25 | U | 0.225 | U | 0.819 | J | **2.95** | |
| 04/14/04 | 0.25 | U | 0.25 | U | 0.225 | U | 0.761 | J | **3.33** | |
| 07/13/04 | 0.25 | U | 0.25 | U | 0.225 | U | 0.591 | J | **2.66** | |
| 10/20/04 | 0.25 | U | 0.25 | U | 0.225 | U | 0.699 | J | **3.71** | |
| 01/18/05 | 0.25 | U | 0.25 | U | 0.225 | U | 0.528 | J | **3.63** | |
| 04/12/05 | 0.25 | U | 0.25 | U | 0.225 | U | 0.21 | U | **2.74** | |
| 07/13/05 | 0.25 | U | 0.25 | U | 0.225 | U | 0.427 | J | **3.84** | |
| 10/12/05 | 0.25 | U | 0.25 | U | 0.225 | U | 0.453 | J | **3.68** | |
| 04/19/06 | 0.25 | U | 0.25 | U | 0.225 | U | 1.04 | J | **3.27** | |
| 07/26/06 | 0.25 | U | 0.25 | U | 0.355 | U | 0.21 | U | **1.69** | |
| 10/18/06 | 0.075 | U, CSL | 0.075 | U | 0.05 | U | 0.36 | J | **2.09** | |

ANALYTICAL RESULTS FROM PLUME 1/2 MONITORING WELLS

| Date | EC-5 | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1, 1 - DCA | | 1, 1 - DCE | | PCE | | 1, 1, 1 - TCA | | TCE | |
| MCL/ES/PAL Limitations | None/850/85 | | 7/7/0.7 | | 5/5/0.5 | | 200/200/40 | | 5/5/0.5 | |
| 10/15/85 | | NA | | NA | | NA | | NA | 0.5 | U |
| 12/18/91 | 0.1 | U | 0.1 | U | 0.1 | U | 0.1 | U | 0.4 | |
| 06/15/92 | | NA | | NA | | NA | | NA | 0.5 | U |
| 06/20/92 | | NA | | NA | | NA | | NA | 0.5 | U |
| 05/11/95 | 0.25 | U | 0.25 | U | 0.35 | U | 0.4 | U | 0.3 | U |
| 06/15/95 | | NA | | NA | | NA | | NA | 0.5 | U |
| 04/30/96 | 0.2 | U | 0.2 | U | 0.2 | U | 0.5 | | 0.7 | |
| 10/04/96 | 0.1 | U | 0.15 | U | 0.1 | U | 0.1 | U | 0.1 | U |
| 05/05/97 | 0.3 | | 0.15 | U | 0.1 | U | 0.4 | | 0.4 | |
| 10/09/97 | 0.1 | U | 0.1 | U | 0.1 | U | 0.15 | U | 0.1 | U |
| 05/01/98 | 0.1 | U | 0.15 | U | 0.1 | U | 0.1 | U | 0.1 | U |
| 11/06/98 | 0.1 | U | 0.25 | U | 0.35 | U | 0.3 | U | 0.3 | U |
| 04/20/99 | 0.1 | U | 0.1 | U | 0.1 | U | 0.1 | U | 0.18 | U, CSH |
| 05/20/99 | 0.5 | U | 0.25 | U | 0.35 | U | 0.35 | U | 0.3 | U |
| 09/13/99 | 0.5 | U | 0.25 | U | 0.35 | U | 0.35 | U | 0.3 | U |
| 07/19/00 | 0.075 | U | 0.075 | U | 0.075 | U | 0.075 | U | 0.2 | U |
| 07/18/01 | 0.19 | U | 0.19 | U | 0.13 | U | 0.1 | U | 0.13 | U |
| 10/17/01 | 0.19 | U | 0.19 | U | 0.13 | U | 0.1 | U | 0.13 | U |
| 04/22/02 | 0.18 | U | 0.195 | U | 0.16 | U | 0.21 | U | 0.18 | U |
| 11/18/02 | 0.18 | U | 0.195 | U | 0.16 | U | 0.21 | U | 0.18 | U |
| 04/10/03 | 0.18 | U | 0.195 | U | 0.16 | U | 0.21 | U | 0.18 | U |
| 07/23/03 | 0.18 | U | 0.195 | U | 0.16 | U | 0.21 | U | 0.18 | U |
| 07/13/04 | 0.25 | U | 0.25 | U | 0.225 | U | 0.21 | U | 0.25 | U |
| 07/13/05 | 0.25 | U | 0.25 | U | 0.225 | U | 0.21 | U | 0.25 | U |
| 07/26/06 | 0.25 | U | 0.25 | U | 0.355 | U | 0.21 | U | 0.25 | U |

ANALYTICAL RESULTS FROM PLUME 1/2 MONITORING WELLS

| Date | EC-6 | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1, 1 - DCA | | 1, 1 - DCE | | PCE | | 1, 1, 1 - TCA | | TCE | |
| MCL/ES/PAL Limitations | None/850/85 | | 7/7/0.7 | | 5/5/0.5 | | 200/200/40 | | 5/5/0.5 | |
| 10/15/85 | | NA | | NA | | NA | | NA | 4.9 | |
| 12/18/91 | 0.6 | J | 0.1 | U | 0.1 | U | 3 | J | 1 | J |
| 06/15/92 | | NA | | NA | | NA | | NA | 1 | |
| 06/20/92 | | NA | | NA | | NA | | NA | 1 | |
| 05/11/95 | 0.25 | U | 0.25 | 0.5 U | 0.35 | U | 0.4 | U | 0.3 | U |
| 06/15/95 | | NA | | NA | | NA | | NA | 1 | |
| 04/30/96 | 0.7 | | 0.2 | U | 0.2 | U | 1.3 | | 1 | |
| 10/04/96 | 0.1 | U | 0.15 | U | 0.1 | U | 0.5 | | 0.6 | |
| 05/05/97 | 0.4 | | 0.15 | U | 0.1 | U | 0.6 | | 0.6 | |
| 10/09/97 | 0.1 | U | 0.1 | U | 0.1 | U | 0.15 | U | 0.2 | |
| 05/01/98 | 0.3 | | 0.15 | U | 0.1 | U | 3.8 | | 2.6 | |
| 11/06/98 | 0.1 | U | 0.25 | U | 0.35 | U | 0.7 | | 0.7 | |
| 04/20/99 | 0.1 | U | 0.1 | U | 0.1 | U | 0.223 | J | 0.18 | U, CSH |
| 05/20/99 | 0.5 | U | 0.25 | U | 0.35 | U | 0.35 | U | 0.3 | U |
| 09/13/99 | 0.5 | U | 0.25 | U | 0.35 | U | 0.35 | U | 0.3 | U |
| 10/08/99 | 0.075 | U | 0.075 | U | 0.075 | U | 0.075 | U | 0.589 | |
| 05/24/00 | 0.075 | U | 0.075 | U | 0.075 | U | 0.075 | U | 0.2 | U |
| 10/13/00 | 0.075 | U | 0.075 | U | 0.075 | U | 0.075 | U | 0.243 | J |
| 05/10/01 | 0.159 | J | 0.075 | U | 0.075 | U | 0.424 | J | 0.2 | U |
| 10/16/01 | 0.19 | U | 0.19 | U | 0.13 | U | 0.1 | U | 0.13 | U |
| 04/22/02 | 0.18 | U | 0.195 | U, SPL | 0.16 | U, SPL | 0.483 | J | 0.18 | U |
| 11/18/02 | 0.18 | U | 0.195 | U | 0.16 | U | 0.21 | U | 0.18 | U |
| 04/10/03 | 0.18 | U | 0.195 | U | 0.16 | U | 0.21 | U | 0.42 | J |
| [illegible]/23/03 | 0.18 | U | 0.195 | U | 0.16 | U | 0.21 | U | 0.18 | U |
| [illegible]3/04 | 0.25 | U | 0.25 | U | 0.225 | U | 0.21 | U | 0.25 | U |
| 04/12/05 | 0.25 | U | 0.25 | U | 0.225 | U | 0.21 | U | 0.25 | U |
| 10/12/05 | 0.25 | U | 0.25 | U | 0.225 | U | 0.21 | U | 0.25 | U |
| 04/19/06 | 0.25 | U | 0.25 | U | 0.225 | U | 0.21 | U | 0.25 | U |

ANALYTICAL RESULTS FROM PLUME 1/2 MONITORING WELLS

| Date | PW-1 (petroleum well) | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1, 1 - DCA | | 1, 1 - DCE | | PCE | | 1, 1, 1 - TCA | | TCE | |
| MCL/ES/PAL Limitations | None/850/85 | | 7/7/0.7 | | 5/5/0.5 | | 200/200/40 | | 5/5/0.5 | |
| 07/26/99 | 0.225 | J | 0.075 | U | 0.075 | U | 1.19 | | 0.2 | U |
| 10/06/99 | 0.235 | J | 0.075 | U | 0.075 | U | 1.58 | J | 0.05 | U, SPL, Dup |
| 05/25/00 | 0.075 | U | 0.075 | U | 0.075 | U | 0.58 | | 0.2 | U |
| 06/07/00 | 0.075 | U | 0.075 | U | 0.075 | U | 0.57 | | 0.2 | U |
| 10/13/00 | 0.075 | U | 0.075 | U | 0.075 | U | 2.34 | | 0.193 | J |
| 05/08/01 | 0.075 | U | 0.075 | U | 0.075 | U | 1.13 | | 0.2 | U, CSL |
| 10/16/01 | 0.19 | U | 0.19 | U | 0.13 | U | 0.605 | J | 0.13 | U |
| 04/22/02 | 0.18 | U | 0.195 | U | 0.16 | U | 1.18 | J | 0.18 | U |
| 10/22/02 | 0.18 | U | 0.195 | U | 0.16 | U | 1.03 | J | 0.18 | U |
| 04/14/04 | 0.25 | U | 0.25 | U | 0.225 | U | 0.21 | U | 0.25 | U |

ANALYTICAL RESULTS FROM PLUME 1/2 MONITORING WELLS

| Date | RW-3A | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1, 1 - DCA | | 1, 1 - DCE | | PCE | | 1, 1, 1 - TCA | | TCE | |
| MCL/ES/PAL Limitations | None/850/85 | | 7/7/0.7 | | 5/5/0.5 | | 200/200/40 | | 5/5/0.5 | |
| 10/15/85 | | NA | 0.5 | U | | NA | 0.5 | U | **13** | |
| 07/15/87 | | NA | 0.5 | U | | NA | 0.5 | U | **7.1** | |
| 04/23/91 | 2 | | **0.7** | | 0.4 | | 14 | | **6** | B, J |
| 12/11/91 | 3 | | **0.9** | | 0.15 | U | 17 | | **6** | |
| 06/15/92 | | NA | | NA | | NA | | NA | **6** | |
| 06/20/92 | | NA | | NA | | NA | | NA | **6** | |
| 07/15/92 | | NA | 0.5 | U | | NA | 0.5 | U | **6** | |
| 06/15/95 | | NA | | NA | | NA | | NA | **5** | |
| 07/27/95 | 2 | J | | NA | | NA | 12 | | **5** | J |
| 01/11/96 | | NA | | NA | | NA | | NA | **5.5** | |
| 03/16/98 | | NA | | NA | | NA | | NA | **3.77** | |
| 04/19/99 | 0.843 | | 0.3 | J | 0.249 | J | 5.98 | | **4.3** | CSH |
| 10/08/99 | 0.893 | | 0.269 | J | 0.204 | J | 4.89 | | **4.47** | |
| 05/23/00 | 0.359 | J | 0.075 | U | 0.075 | U | 2.64 | | **3.31** | |
| 10/12/00 | 0.495 | J | 0.075 | U | 0.075 | U | 2 | | **3.11** | |
| 05/10/01 | 0.075 | U | 0.075 | U | 0.075 | U | 1.1 | | **2.13** | |
| 10/17/01 | 0.19 | U | 0.19 | U | 0.13 | U | 0.495 | J | **2.24** | |
| 04/22/02 | 0.18 | U | 0.18 | U, SPL | 0.16 | U, SPL | 0.502 | J | **2.03** | |
| 10/23/02 | 0.18 | U | 0.18 | U | 0.16 | U | 0.784 | J | **2.7** | |
| 04/10/03 | 0.18 | U | 0.18 | U | 0.16 | U | 0.21 | U | **1.74** | |
| 10/08/03 | 0.18 | U | 0.195 | U | 0.16 | U | 0.666 | J | **1.97** | |
| 04/14/04 | 0.25 | U | 0.25 | U | 0.225 | U | 0.21 | U | **1.41** | |
| 10/20/04 | 0.25 | U | 0.25 | U | 0.225 | U | 0.21 | U | **1.77** | |
| 04/12/05 | 0.25 | U | 0.25 | U | 0.225 | U | 0.21 | U | **1.09** | J |
| 10/12/05 | 0.25 | U | 0.25 | U | 0.225 | U | 0.21 | U | **1.99** | |
| 04/18/06 | 0.25 | U | 0.25 | U | 0.225 | U | 0.951 | U | **2.65** | |
| 10/18/06 | 0.075 | U, CSL | 0.075 | U | 0.05 | U | 0.40 | J | **1.98** | |

ANALYTICAL RESULTS FROM PLUME 1/2 MONITORING WELLS

| Date | RW-3B | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1, 1 - DCA | | 1, 1 - DCE | | PCE | | 1, 1, 1 - TCA | | TCE | |
| MCL/ES/PAL Limitations | None/850/85 | | 7/7/0.7 | | 5/5/0.5 | | 200/200/40 | | 5/5/0.5 | |
| 10/85 | | NA | | NA | NA | NA | | NA | **24** | |
| 04/23/91 | 4 | | **2** | | **0.7** | | 30 | | **10** | B, J |
| 12/11/91 | 4 | | **2** | | 0.4 | | 30 | | **9** | |
| 06/15/92 | | NA | | NA | NA | NA | | NA | **9** | |
| 06/20/92 | | NA | | NA | NA | NA | | NA | **9** | |
| 07/15/92 | | NA | | NA | NA | NA | | NA | **9** | |
| 07/27/95 | 1 | J | | NA | NA | NA | 8 | J | **4** | J |
| 03/16/98 | | NA | | NA | NA | NA | | NA | **6.31** | |
| 04/19/99 | 1.76 | | 0.523 | J | 0.41 | J | 8.67 | | 0.18 | U |
| 10/08/99 | 2.06 | | 0.484 | J | 0.333 | J | 7.99 | | **7.54** | |
| 05/23/00 | 1.4 | | 0.075 | U | 0.221 | J | 5.73 | | **6.65** | |
| 10/12/00 | 0.766 | | 0.219 | J | 0.239 | J | 3.42 | | **4.94** | |
| 05/10/01 | 0.244 | J | 0.075 | U | 0.276 | J | 1.37 | | **2.64** | |
| 10/17/01 | 0.19 | U | 0.19 | U | 0.13 | U | 0.903 | | **3.41** | |
| 04/22/02 | 0.18 | U | 0.195 | U, SPL | 0.16 | U, SPL | 1.46 | | **4.22** | |
| 10/23/02 | 0.442 | J | 0.195 | | 0.16 | U | 2.19 | | **5.44** | |
| 04/10/03 | 0.18 | U | 0.195 | | 0.16 | U | 0.965 | J | **4.45** | CSH |
| 07/23/03 | 0.18 | U | 0.195 | U | 0.16 | U | 1.26 | J | **3.88** | |
| 10/08/03 | 0.483 | J | 0.195 | U | 0.336 | J | 1.9 | | **5.52** | |
| 02/24/04 | 0.25 | U | 0.25 | U | 0.225 | U | 1.34 | J | **4.16** | |
| 04/14/04 | 0.25 | U | 0.25 | U | 0.225 | U | 1.24 | J | **4.43** | |
| 07/13/04 | 0.25 | U | 0.25 | U | 0.225 | U | 1.39 | J | **4.52** | |
| 10/20/04 | 0.25 | U | 0.25 | U | 0.225 | U | 1.12 | J | **5.20** | |
| 01/18/05 | 0.25 | U | 0.25 | U | 0.225 | U | 0.763 | J | **4.54** | |
| 04/12/05 | 0.25 | U | 0.25 | U | 0.225 | U | 0.876 | J | **4.90** | |
| 07/12/05 | 0.25 | U | 0.25 | U | 0.225 | U | 0.755 | J | **4.42** | |
| 10/12/05 | 0.25 | U | 0.25 | U | 0.225 | U | 0.897 | J | **4.51** | |
| 04/18/06 | 0.25 | U | 0.25 | U | 0.225 | U | 1.26 | J | **4.90** | |
| 07/26/06 | 0.25 | U | 0.25 | U | 0.355 | U | 1.00 | J | **4.05** | |
| 10/18/06 | 0.075 | U, CSL | 0.075 | U | 0.17 | J | 1.04 | | **5.03** | |

ANALYTICAL RESULTS FROM PLUME 1/2 MONITORING WELLS

| Date | RW-3C | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1,1 - DCA | | 1,1 - DCE | | PCE | | 1,1,1 - TCA | | TCE | |
| MCL/ES/PAL Limitations | None/850/85 | | 7/7/0.7 | | 5/5/0.5 | | 200/200/40 | | 5/5/0.5 | |
| 10/15/85 | | NA | 0.5 | U | | NA | 0.5 | U | **26** | |
| 07/15/87 | | NA | 0.5 | U | | NA | 0.5 | U | **14** | |
| 04/01/91 | 3 | | **2** | | **0.5** | | 29 | | **11** | B, J |
| 04/07/91 | 3 | | **2** | | **0.5** | | 29 | | **11** | J |
| 12/01/91 | 3 | J | **0.8** | J | 0.1 | ND | 23 | | **9** | |
| 12/11/91 | 3 | J | **0.8** | J | 0.3 | U | 23 | | **9** | |
| 06/15/92 | | NA | | NA | | NA | | NA | **9** | |
| 06/20/92 | | NA | | NA | | NA | | NA | **9** | |
| 07/15/92 | | NA | 0.5 | U | | NA | 0.5 | U | **9** | |
| 06/15/95 | | NA | | NA | | NA | | NA | **5** | |
| 07/27/95 | 1 | J | 0.5 | J | | NA | 8 | J | **5** | J |
| 01/11/96 | | NA | | NA | | NA | | NA | **9.1** | |
| 03/16/98 | | NA | | NA | | NA | | NA | **5.4** | |
| 04/19/99 | 2.71 | | 0.417 | J | 0.316 | J | 6.67 | | **8.17** | CSH |
| 10/08/99 | 3.4 | | 0.471 | J | 0.3 | J | 7.11 | | **9.44** | |
| 05/23/00 | 1.95 | | 0.329 | J, CSH | 0.305 | J | 3.65 | | **5.58** | |
| 10/12/00 | 1.63 | | 0.236 | J | 0.184 | J | 3.91 | | **5.77** | |
| 05/10/01 | 0.913 | | 0.075 | U | 0.188 | J | 1.84 | | **3.69** | |
| 10/17/01 | 0.19 | U | 0.19 | U | 0.13 | U | 0.539 | J | **1.91** | |
| 04/22/02 | 0.41 | J | 0.195 | U,SPL | 0.16 | U, SPL | 2.07 | | **5.11** | |
| 10/23/02 | 1.04 | J | 0.195 | U | 0.16 | U | 2.92 | | **5.88** | |
| 04/10/03 | 0.18 | U | 0.195 | U | 0.16 | U | 1.53 | | **5.48** | CSH |
| 07/23/03 | 0.387 | J | 0.195 | U | 0.16 | U | 1.63 | | **4.64** | |
| 10/08/03 | 1.29 | | 0.195 | U | 0.324 | J | 3.09 | | **6.52** | |
| 02/24/04 | 0.679 | J | 0.25 | U | 0.225 | U | 1.99 | | **5.27** | |
| 04/14/04 | 0.555 | J | 0.25 | U | 0.225 | U | 1.74 | | **5.13** | |
| 07/13/04 | 0.753 | J | 0.25 | U | 0.225 | U | 1.85 | | **5.64** | |
| 10/20/04 | 0.677 | J | 0.25 | U | 0.225 | U | 1.63 | | **5.57** | |
| 01/18/05 | 0.25 | U | 0.25 | U | 0.225 | U | 1.28 | J | **5.45** | |
| 04/12/05 | 0.25 | U | 0.25 | U | 0.225 | U | 1.29 | J | **5.36** | |
| 07/12/05 | 0.25 | U | 0.25 | U | 0.225 | U | 1.36 | J | **6.25** | |
| 10/12/05 | 0.25 | U | 0.25 | U | 0.225 | U | 1.27 | J | **6.08** | |
| 04/18/06 | 0.25 | U | 0.25 | U | 0.225 | U | 1.53 | | **6.14** | |
| 07/26/06 | 0.25 | U | 0.25 | U | 0.355 | U | 1.11 | J | **4.71** | |
| 10/18/06 | 0.24 | CSL, J | 0.075 | U | 0.15 | J | 1.15 | | **4.87** | |

ANALYTICAL RESULTS FROM PLUME 1/2 MONITORING WELLS

| Date | RW-16 | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1, 1 - DCA | | 1, 1 - DCE | | PCE | | 1, 1, 1 - TCA | | TCE | |
| MCL/ES/PAL Limitations | None/850/85 | | 7/7/0.7 | | 5/5/0.5 | | 200/200/40 | | 5/5/0.5 | |
| 10/15/85 | | NA | | NA | | NA | | NA | **9.6** | |
| 07/15/87 | | NA | | NA | | NA | | NA | **9.6** | |
| 10/15/87 | | NA | | NA | | NA | | NA | **7.6** | |
| 05/29/90 | | NA | | NA | | NA | | NA | **8** | |
| 06/02/90 | 3 | | **2** | | **2** | | **41** | | **8** | |
| 04/19/91 | 2 | | **1** | | **2** | | 31 | | **8** | J |
| 12/19/91 | 2 | J | **0.7** | J | **1** | B, J | 22 | | **7** | J |
| 06/15/92 | | NA | | NA | | NA | | NA | **8** | |
| 06/20/92 | | NA | | NA | | NA | | NA | **8** | |
| 06/15/95 | | NA | | NA | | NA | | NA | **4** | |
| 03/16/98 | | NA | | NA | | NA | | NA | **4.16** | |
| 04/15/99 | 0.333 | CSH, J | 0.1 | U | **0.854** | | 2.3 | | **4.84** | MSH |
| 05/23/00 | 0.075 | J | 0.075 | U, CSH | **0.514** | | 0.955 | | 0.2 | U |
| 10/12/00 | 0.252 | J | 0.075 | U | **0.581** | | 1.56 | | **4.51** | |
| 05/09/01 | 0.075 | U | 0.075 | U | **0.665** | | 0.809 | | **3.15** | |
| 04/22/02 | 0.18 | U | 0.195 | U, SPL | **1.04** | SPL | 0.21 | U | **2.24** | |
| 10/24/02 | 0.18 | U | 0.195 | U | **1.23** | | 0.735 | J | **3.41** | |
| 04/10/03 | 0.18 | U | 0.195 | U | **0.91** | J | 0.21 | U | **3.28** | |
| 10/08/03 | 0.18 | U | 0.195 | U | **0.995** | J | 0.925 | J | **3.85** | |
| 04/14/04 | 0.25 | U | 0.25 | U | **0.622** | J | 0.557 | J | **2.76** | |
| 10/20/04 | 0.25 | U | 0.25 | U | **0.584** | J | 0.518 | J | **2.90** | |
| 04/12/05 | 0.25 | U | 0.25 | U | 0.225 | U | 0.21 | U | **2.73** | |
| 10/11/05 | 0.25 | U | 0.25 | U | **0.611** | J | 0.21 | U | **3.03** | |
| 04/18/06 | 0.25 | U | 0.25 | U | **0.611** | J | 0.21 | U | **3.26** | |
| 10/18/06 | 0.075 | U, CSL | 0.075 | U | 0.27 | J | 0.32 | J | **2.17** | |

ANALYTICAL RESULTS FROM PLUME 1/2 MONITORING WELLS

| Date | RW-16B | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1, 1 - DCA | | 1, 1 - DCE | | PCE | | 1, 1, 1 - TCA | | TCE | |
| MCL/ES/PAL Limitations | None/850/85 | | 7/7/0.7 | | 5/5/0.5 | | 200/200/40 | | 5/5/0.5 | |
| 10/15/85 | | NA | | NA | | NA | | NA | **10** | |
| 04/19/91 | 3 | | **2** | | **0.5** | | **43** | | **9** | B |
| 12/19/91 | 6 | | **4** | | **1** | J | **32** | J | **17** | J |
| 06/15/92 | | NA | | NA | | NA | | NA | **18** | |
| 06/20/92 | | NA | | NA | | NA | | NA | **18** | |
| 07/15/92 | | NA | 0.5 | U | | NA | 0.5 | U | **18** | |
| 06/15/95 | | NA | | NA | | NA | | NA | **8** | |
| 07/27/95 | 1 | J | 0.5 | J | 0.4 | J | 17 | | **8** | J |
| 01/11/96 | | NA | | NA | | NA | | NA | **8.9** | |
| 03/16/98 | | NA | | NA | | NA | | NA | **1.81** | |
| 04/15/99 | 0.373 | CSH, J | 0.1 | U | 0.242 | J | 2.94 | | **3.96** | MSH |
| 10/07/99 | 0.8 | Dup | 0.075 | U | 0.36 | J | 2.66 | Dup | **7.75** | |
| 05/23/00 | 0.424 | J | 0.075 | U, CSH | 0.262 | J | 1.52 | | 0.2 | U |
| 10/12/00 | 0.575 | | 0.075 | U | 0.35 | | 2.43 | | **7.16** | |
| 05/09/01 | 0.215 | J | 0.075 | U | 0.289 | J | 1.2 | | **4.74** | |
| 10/18/01 | 0.19 | U | 0.19 | U | 0.13 | U | 1.03 | | **3.63** | |
| 04/22/02 | 0.18 | U | 0.195 | U, SPL | 0.16 | U, SPL | 0.77 | J | **4.34** | |
| 10/24/02 | 0.18 | U | 0.195 | U | 0.16 | U | 1.2 | J | **5.08** | |
| 04/10/03 | 0.18 | U | 0.195 | U | 0.16 | U | 0.21 | U | **4.73** | |
| 07/23/03 | 0.18 | U | 0.195 | U | 0.16 | U | 1.02 | J | **4.64** | |
| 10/08/03 | 0.18 | U | 0.195 | U | 0.16 | U | 1.25 | J | **5.01** | |
| 02/24/04 | 0.25 | U | 0.25 | U | 0.225 | U | 1.01 | J | **4.24** | |
| 04/14/04 | 0.25 | U | 0.25 | U | 0.225 | U | 0.892 | J | **4.32** | |
| 07/15/04 | 0.25 | U | 0.25 | U | 0.225 | U | 1.24 | J | **4.97** | |
| 10/20/04 | 0.25 | U | 0.25 | U | 0.225 | U | 0.977 | J | **4.83** | |
| 01/18/05 | 0.25 | U | 0.25 | U | 0.225 | U | 0.695 | J | **4.79** | |
| 04/12/05 | 0.25 | U | 0.25 | U | 0.225 | U | 0.785 | J | **4.86** | |
| 10/11/05 | 0.25 | U | 0.25 | U | 0.225 | U | 0.739 | J | **5.00** | |
| 04/18/06 | 0.25 | U | 0.25 | U | 0.225 | U | 1.10 | J | **5.07** | |
| 10/18/06 | 0.075 | U, CSL | 0.075 | U | 0.17 | J | 0.78 | | **4.30** | |

ANALYTICAL RESULTS FROM PLUME 1/2 MONITORING WELLS

| Date | RW-16C | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1, 1 - DCA | | 1, 1 - DCE | | PCE | | 1, 1, 1 - TCA | | TCE | |
| MCL/ES/PAL Limitations | None/850/85 | | 7/7/0.7 | | 5/5/0.5 | | 200/200/40 | | 5/5/0.5 | |
| 10/15/85 | | NA | | NA | | NA | | NA | 10 | |
| 04/19/91 | 2 | | 0.8 | | 0.3 | | 22 | | 9 | J |
| 12/19/91 | 2 | | 0.7 | | 0.2 | J | 22 | | 8 | |
| 06/15/92 | | NA | | NA | | NA | | NA | 8 | |
| 06/20/92 | | NA | | NA | | NA | | NA | 8 | |
| 07/15/92 | | NA | | NA | | NA | | NA | 8 | |
| 06/15/95 | | NA | | NA | | NA | | NA | 3 | |
| 07/27/95 | 0.8 | J | | NA | | NA | 10 | | 3 | J |
| 03/16/98 | | NA | | NA | | NA | | NA | 1.98 | |
| 04/15/99 | 0.863 | CSH, MSH | 0.1 | U | 0.299 | J | 2.44 | | 5.62 | CSH |
| 10/07/99 | 0.8 | Dup | 0.075 | U | 0.173 | J | 1.84 | Dup | 5.39 | |
| 05/23/00 | 0.328 | J | 0.075 | U, CSH | 0.075 | U | 1.01 | | 0.2 | U |
| 10/12/00 | 0.358 | J | 0.075 | U | 0.075 | U | 1.06 | | 3.59 | |
| 05/09/01 | 0.075 | U | 0.075 | U | 0.075 | U | 0.313 | J | 1.67 | |
| 10/18/01 | 0.19 | U | 0.19 | U | 0.13 | U | 0.792 | | 0.13 | U |
| 04/22/02 | 0.18 | U | 0.195 | U, SPL | 0.16 | U, SPL | 0.517 | J | 3.74 | |
| 10/24/02 | 0.18 | U | 0.195 | U | 0.16 | U | 0.899 | J | 4.20 | |
| 10/08/03 | 0.18 | U | 0.195 | U | 0.16 | U | 0.94 | J | 4.46 | |
| 04/14/04 | 0.25 | U | 0.25 | U | 0.225 | U | 0.631 | J | 4.14 | |
| 10/20/04 | 0.25 | U | 0.25 | U | 0.225 | U | 0.64 | J | 4.26 | |
| 04/12/05 | 0.25 | U | 0.25 | U | 0.225 | U | 0.479 | J | 3.98 | |
| 10/11/05 | 0.25 | U | 0.25 | U | 0.225 | U | 0.21 | U | 4.06 | |
| 04/18/06 | 0.25 | U | 0.25 | U | 0.225 | U | 0.21 | U | 4.39 | |
| 10/18/06 | 0.075 | U, CSL | 0.075 | U | 0.05 | U | 0.48 | J | 3.40 | |

**Gannett Fleming**

NATIONAL PRESTO INDUSTRIES, INC.
EAU CLAIRE, WISCONSIN

ANALYTICAL RESULTS FROM PLUME 3/4 MONITORING WELLS

| Date | MW-5A | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1, 1 - DCA | | 1, 1 - DCE | | PCE | | 1, 1, 1 - TCA | | TCE | |
| MCL/ES/PAL Limitations | None/850/85 | | 7/7/0.7 | | 5/5/0.5 | | 200/200/40 | | 5/5/0.5 | |
| 1/88 | 120 | D | 3.1 | | 6.2 | | 300 | | 0.8 | |
| 10/88 | 210 | | 5.6 | J | 9.6 | | 400 | | 1.3 | U |
| 5/90 | 180 | | 5 | | 10 | | 510 | | 1 | |
| 4/91 | 150 | | 3 | | 10 | | 280 | | 0.5 | U |
| 7/92 | 91 | | 1.0 | J | 5 | | 190 | | 0.5 | U |
| 02/08/94 | 110 | | 2 | | 8 | | 290 | | 0.9 | |
| 03/28/94 | 89 | | 5 | | 7.3 | | 190 | | 5 | |
| 06/06/94 | 71 | | 5 | | 7 | | 150 | | 5 | |
| 08/23/94 | 75 | | 5 | | 6 | | 160 | | 5 | |
| 10/27/94 | 83 | | 2 | | 5.9 | | 160 | | 1.3 | |
| 01/19/95 | 55 | | 2.1 | | 4.4 | | 110 | | 0.18 | ND |
| 04/19/95 | 22 | | 1.4 | | 2.9 | | 79 | | 0.18 | ND |
| 07/18/95 | 14 | | 0.18 | | 2.8 | | 88 | | 0.18 | ND |
| 09/12/95 | 1 | | 1 | | 1 | | 85 | | 1 | |
| 01/08/96 | 10 | | 1.1 | | 2.5 | | 57 | | 0.18 | ND |
| 04/17/96 | 5.7 | | 0.18 | ND | 1.7 | | 40 | | 0.23 | |
| 07/08/96 | 4.4 | | 1.5 | | 1.4 | | 37 | | 0.18 | ND |
| 09/30/96 | 3.4 | | 0.93 | J | 1.6 | | 35 | | 0.18 | ND |
| 03/17/97 | 1.32 | | 0.09 | U | 0.11 | U | 25.6 | | 0.06 | U |
| 05/19/97 | 1.41 | | 0.09 | U | 0.52 | J | 22.4 | | 0.06 | U |
| 07/21/97 | 2.78 | | 0.09 | U | 0.7 | J | 31.3 | | 0.06 | U |
| 10/21/97 | 2.7 | | 0.25 | U | 0.992 | | 31.3 | | 0.2 | U |
| 01/27/98 | 2.36 | | 0.1 | U | 0.926 | | 31.2 | | 0.18 | U |
| 04/20/98 | 1.6 | | 0.1 | U | 0.805 | | 24.7 | | 0.18 | U |
| 07/20/98 | 31.2 | | 0.29 | | 3.71 | | 55.6 | | 0.18 | U |
| 10/26/98 | 4.61 | | 0.22 | | 1.88 | | 34.5 | | 0.18 | U |
| 01/19/99 | 1.51 | | 0.1 | U | 1.21 | | 21.7 | | 0.18 | U |
| 04/14/99 | 0.732 | CSH | 0.216 | J | 0.814 | | 18.2 | | 0.18 | U |
| 07/27/99 | 0.306 | J | 0.225 | J | 0.557 | | 9.92 | | 0.2 | U |
| 10/06/99 | 0.180 | J | 0.075 | < U | 0.384 | J | 7.49 | J | 0.05 | U, SPL, Dup |
| 02/01/00 | 0.075 | U | 0.075 | U | 0.337 | J | 3.63 | | 0.2 | U |
| 05/25/00 | 0.075 | U | 0.075 | U, SPH | 0.161 | J | 2.34 | | 0.2 | U |
| 07/17/00 | 0.075 | U | 0.075 | U | 0.195 | J | 2.13 | | 0.2 | U |
| 10/10/00 | 0.075 | U, SPH | 0.075 | U | 0.075 | U | 1.06 | | 0.2 | U |
| 01/23/01 | 0.075 | U, SPH | 0.075 | U | 0.266 | J | 1.17 | SPH | 0.2 | U |
| 05/08/01 | 0.075 | U | 0.075 | U | 0.075 | U | 0.075 | U | 0.2 | U, CSL |
| 07/16/01 | 0.19 | U | 0.19 | U | 0.13 | U | 1.28 | | 0.13 | U, CSH |
| 10/16/01 | 0.19 | U | 0.19 | U | 0.13 | U | 0.486 | J | 0.13 | U |
| 01/08/02 | 0.19 | U | 0.19 | U | 0.13 | U | 0.444 | J | 0.13 | U |
| 04/22/02 | 0.18 | U | 0.195 | U | 0.16 | U | 1.04 | J | 0.18 | U |
| 07/09/02 | 0.18 | U | 0.195 | U | 0.16 | U | 0.611 | J | 0.18 | U |
| 10/21/02 | 0.18 | U | 0.195 | U | 0.16 | U | 0.21 | U | 0.18 | U |
| 01/06/03 | 0.18 | U | 0.195 | U | 0.16 | U | 0.21 | U | 0.18 | U |
| 04/08/03 | 0.18 | U | 0.195 | U | 0.16 | U | 0.21 | U | 0.18 | U |
| 07/22/03 | 0.18 | U | 0.195 | U | 0.16 | U | 0.21 | U | 0.18 | U |

ANALYTICAL RESULTS FROM PLUME 3/4 MONITORING WELLS

| Date | MW-5A | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1, 1 - DCA | | 1, 1 - DCE | | PCE | | 1, 1, 1 - TCA | | TCE | |
| MCL/ES/PAL Limitations | None/850/85 | | 7/7/0.7 | | 5/5/0.5 | | 200/200/40 | | 5/5/0.5 | |
| 07/14/04 | 0.25 | U | 0.25 | U | 0.225 | U | 0.21 | U | 0.25 | U |
| 04/13/05 | 0.25 | U | 0.25 | U | 0.225 | U | 0.21 | U | 0.25 | U |
| 07/13/05 | 0.25 | U | 0.25 | U | 0.225 | U | 0.21 | U | 0.25 | U |
| 07/25/06 | 0.25 | U | 0.25 | U | 0.355 | U | 0.21 | U | 0.25 | U |

ANALYTICAL RESULTS FROM PLUME 3/4 MONITORING WELLS

| Date | MW-5B | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1, 1 - DCA | | 1, 1 - DCE | | PCE | | 1, 1, 1 - TCA | | TCE | |
| MCL/ES/PAL Limitations | None/850/85 | | 7/7/0.7 | | 5/5/0.5 | | 200/200/40 | | 5/5/0.5 | |
| 1/88 | 0.6 | | 0.12 | U | 0.075 | U | **16** | | 0.075 | U |
| 10/88 | 1.7 | | 0.64 | J | 0.44 | | **19** | | 0.105 | U |
| 5/90 | **150** | | **5.0** | | **12** | | **410** | | 1.5 | U |
| 7/90 | **92** | D, J | **3.0** | | **10** | | **210** | D | **2** | |
| 4/91 | 8 | | **0.5** | | **0.7** | | 34 | | 0.3 | U |
| 7/92 | 15 | | **0.8** | | **1** | | **48** | | 0.1 | U |
| 02/08/94 | 3 | | 0.4 | | **0.6** | | 28 | | 0.18 | ND |
| 03/28/94 | 3.1 | | 0.18 | ND | 0.18 | ND | 24 | | 0.18 | ND |
| 06/06/94 | 1.5 | | 0.18 | ND | 0.18 | ND | 7.1 | | 0.18 | ND |
| 08/23/94 | 3.7 | | 0.18 | ND | 0.18 | ND | 9.8 | | 0.18 | ND |
| 10/27/94 | 1.3 | | 0.18 | ND | 0.18 | ND | 8.9 | | 0.18 | ND |
| 01/19/95 | 0.18 | ND | 0.18 | ND | 0.18 | ND | 5.3 | | 0.18 | ND |
| 04/19/95 | 1 | | 0.18 | ND | 0.18 | ND | 10 | | 0.18 | ND |
| 07/18/95 | 0.18 | ND | 0.18 | ND | 0.18 | ND | 6.4 | | 0.18 | ND |
| 09/12/95 | 0.18 | ND | 0.18 | ND | 0.18 | ND | 7.1 | | 0.18 | ND |
| 01/08/96 | 0.18 | ND | 0.18 | ND | 0.18 | ND | 2.8 | | 0.18 | ND |
| 04/17/96 | 0.91 | | 0.18 | ND | 0.29 | | 3.5 | | 0.18 | ND |
| 07/08/96 | 0.76 | J | 0.18 | ND | 0.18 | ND | 3.1 | | 0.18 | ND |
| 09/30/96 | 0.18 | ND | 0.18 | ND | 0.18 | ND | 1.8 | | 0.18 | ND |
| 03/17/97 | 0.04 | U | 0.09 | U | 0.11 | U | 0.746 | J | 0.06 | U |
| 05/19/97 | 0.04 | U | 0.09 | U | 0.11 | U | 0.69 | J | 0.06 | U |
| 07/21/97 | 0.04 | U | 0.09 | U | 0.11 | U | 1.09 | | 0.06 | U |
| 10/21/97 | 0.2 | U | 0.25 | U | 0.3 | U | 2.14 | | 0.2 | U |
| 01/27/98 | 0.436 | | 0.1 | U | 0.1 | U | 2.23 | | 0.18 | U |
| 04/20/98 | 0.1 | U | 0.1 | U | 0.1 | U | 2.61 | | 0.18 | U |
| 07/20/98 | 31.6 | | 0.29 | | **4.02** | | 59.4 | | 0.18 | U |
| 10/26/98 | 0.1 | U | 0.1 | U | 0.1 | U | 1.48 | | 0.18 | U |
| 01/19/99 | 0.1 | U | 0.1 | U | 0.1 | U | 1.39 | | 0.18 | U |
| 04/14/99 | 0.1 | U | 0.1 | U | 0.1 | U | 0.605 | J | 0.18 | U |
| 07/27/99 | 0.05 | U | 0.075 | U | 0.075 | U | 0.347 | J | 0.2 | U |
| 10/06/99 | 0.075 | U | 0.075 | U | 0.075 | U | 0.391 | J | 0.153 | J, SPL, Dup |
| 02/01/00 | 0.075 | U | 0.075 | U | 0.075 | U | 0.222 | J | 0.2 | U |
| 05/25/00 | 0.075 | U | 0.075 | U, CSH | 0.075 | U | 0.075 | U | 0.2 | U |
| 07/17/00 | 0.075 | U | 0.075 | U | 0.075 | U | 0.075 | U | 0.2 | U |
| 10/10/00 | 0.075 | U, SPH | 0.075 | U | 0.075 | U | 0.075 | U | 0.2 | U |
| 01/23/01 | 0.075 | U, SPH | 0.075 | U | 0.075 | U | 0.075 | U, SPH | 0.2 | U |
| 05/08/01 | 0.075 | U | 0.075 | U | 0.183 | U | 1.09 | | 0.2 | U, CSL |
| 07/16/01 | 0.19 | U | 0.19 | U | 0.13 | U | 0.2 | J | 0.13 | U, CSH |
| 10/16/01 | 0.19 | U | 0.19 | U | 0.13 | U | 0.1 | U | 0.13 | U |
| 01/08/02 | 0.19 | U | 0.19 | U | 0.13 | U | 0.1 | U | 0.13 | U |
| 04/22/02 | 0.18 | U | 0.195 | U | 0.16 | U | 0.21 | U | 0.18 | U |
| 07/09/02 | 0.18 | U | 0.195 | U | 0.16 | U | 0.21 | U | 0.18 | U |
| 10/21/02 | 0.18 | U | 0.195 | U | 0.16 | U | 0.21 | U | 0.18 | U |
| 01/06/03 | 0.18 | U | 0.195 | U | 0.16 | U | 0.21 | U | 0.18 | U |
| 04/08/03 | 0.18 | U | 0.195 | U | 0.16 | U | 0.21 | U | 0.18 | U |
| 07/22/03 | 0.18 | U | 0.195 | U | 0.16 | U | 0.21 | U | 0.18 | U |
| 07/14/04 | 0.25 | U | 0.25 | U | 0.225 | U | 0.21 | U | 0.25 | U |

ANALYTICAL RESULTS FROM PLUME 3/4 MONITORING WELLS

| Date | MW-5B | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1, 1 - DCA | | 1, 1 - DCE | | PCE | | 1, 1, 1 - TCA | | TCE | |
| MCL/ES/PAL Limitations | None/850/85 | | 7/7/0.7 | | 5/5/0.5 | | 200/200/40 | | 5/5/0.5 | |
| 04/13/05 | 0.25 | U | 0.25 | U | 0.225 | U | 0.21 | U | 0.25 | U |
| 07/13/05 | 0.25 | U | 0.25 | U | 0.225 | U | 0.21 | U | 0.25 | U |
| 07/25/06 | 0.25 | U | 0.25 | U | 0.355 | U | 0.21 | U | 0.25 | U |

ANALYTICAL RESULTS FROM PLUME 3/4 MONITORING WELLS

| Date | MW-6 | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1, 1 - DCA | | 1, 1 - DCE | | PCE | | 1, 1, 1 - TCA | | TCE | |
| MCL/ES/PAL Limitations | None/850/85 | | 7/7/0.7 | | 5/5/0.5 | | 200/200/40 | | 5/5/0.5 | |
| 1/88 | 0.12 | U | 0.3 | | 0.075 | U | 14 | | 0.075 | U |
| 10/88 | 1.5 | | 1.2 | | 0.18 | ND | 24 | | 0.18 | ND |
| 5/90 | 0.9 | | 0.8 | | 0.1 | J | 19 | | 0.1 | U |
| 4/91 | 0.1 | U | 0.3 | | 0.15 | U | 12 | B, J | 0.3 | U |
| 02/08/94 | 0.8 | | 0.18 | ND | 0.3 | | 23 | | 0.18 | ND |
| 03/28/94 | 0.18 | ND | 0.18 | ND | 0.18 | ND | 7.4 | | 0.18 | ND |
| 06/06/94 | 0.18 | ND | 0.18 | ND | 0.18 | ND | 8.2 | | 0.18 | ND |
| 08/23/94 | 0.18 | ND | 0.18 | ND | 0.18 | ND | 12 | | 0.18 | ND |
| 10/27/94 | 0.18 | ND | 0.18 | ND | 0.18 | ND | 11 | | 0.18 | ND |
| 01/19/95 | 0.18 | ND | 0.18 | ND | 0.18 | ND | 13 | | 0.18 | ND |
| 04/19/95 | 0.18 | ND | 0.18 | ND | 0.18 | ND | 13 | | 0.18 | ND |
| 07/18/95 | 0.18 | ND | 0.18 | ND | 0.18 | ND | 8.4 | | 0.18 | ND |
| 09/12/95 | 0.18 | ND | 0.18 | ND | 0.18 | ND | 14 | | 0.18 | ND |
| 01/08/96 | 0.18 | ND | 0.18 | ND | 0.18 | ND | 9.6 | | 0.18 | ND |
| 04/17/96 | 0.18 | ND | 0.18 | ND | 0.18 | | 5.6 | | 0.18 | ND |
| 07/08/96 | 0.18 | ND | 0.18 | ND | 0.18 | ND | 4.8 | | 0.18 | ND |
| 10/01/96 | 0.18 | ND | 0.18 | ND | 0.18 | ND | 9.9 | | 0.18 | ND |
| 03/17/97 | 0.284 | J | 0.658 | J | 0.11 | U | 21.1 | | 0.06 | U |
| 05/19/97 | 0.04 | U | 0.20 | J | 0.11 | U | 8.87 | | 0.06 | U |
| 07/21/97 | 0.04 | U | 0.09 | U | 0.22 | U | 5.19 | | 0.06 | U |
| 10/22/97 | 0.2 | U | 0.25 | U | 0.3 | U | 2.87 | | 0.2 | U |
| 01/27/98 | 0.1 | U | 0.1 | U | 0.1 | U | 3.24 | | 0.18 | U |
| 04/20/98 | 0.1 | U | 0.1 | U | 0.1 | U | 4.05 | | 0.18 | U |
| 07/21/98 | 0.1 | U | 0.1 | U | 0.1 | U | 3 | | 0.18 | U |
| 10/27/98 | 0.1 | U | 0.1 | U | 0.1 | U | 3.31 | | 0.18 | U |
| 01/19/99 | 0.1 | U | 0.1 | U | 0.1 | U | 2.67 | | 0.18 | U |
| 04/13/99 | 0.1 | U | 0.1 | U | 0.1 | U | 2.06 | | 0.18 | U |
| 07/26/99 | 0.05 | U | 0.075 | U | 0.075 | U | 1.64 | | 0.2 | U |
| 10/05/99 | 0.075 | U | 0.075 | U | 0.075 | U | 1.51 | | 0.133 | J |
| 02/01/00 | 0.075 | U | 0.075 | U | 0.075 | U | 1.26 | | 0.2 | U |
| 06/06/00 | 0.075 | U | 0.075 | U, CSH | 0.075 | U | 0.81 | | 0.2 | U |
| 07/17/00 | 0.075 | U | 0.075 | U | 0.075 | U | 0.584 | | 0.2 | U |
| 10/10/00 | 0.075 | U, SPH | 0.075 | U | 0.075 | U | 0.611 | | 0.2 | U |
| 01/23/01 | 0.075 | U, SPH | 0.075 | U | 0.075 | U | 0.261 | J, SPH | 0.2 | U |
| 05/08/01 | 0.075 | U | 0.075 | U | 0.075 | U | 0.41 | J | 0.2 | U, CSL |
| 07/17/01 | 0.19 | U | 0.19 | U | 0.13 | U | 0.435 | J | 0.13 | U |
| 10/16/01 | 0.19 | U | 0.19 | U | 0.13 | U | 0.1 | U | 0.13 | U |
| 01/08/02 | 0.19 | U | 0.19 | U | 0.13 | U | 0.1 | U | 0.13 | U |
| 04/22/02 | 0.18 | U | 0.195 | U | 0.16 | U | 0.21 | U | 0.18 | U |
| 07/08/02 | 0.18 | U | 0.195 | U | 0.16 | U | 0.21 | U | 0.18 | U |
| 10/21/02 | 0.18 | U | 0.195 | U | 0.16 | U | 0.21 | U | 0.18 | U |
| 01/06/03 | 0.18 | U | 0.195 | U | 0.16 | U | 0.21 | U | 0.18 | U |
| 04/13/05 | 0.25 | U | 0.25 | U | 0.225 | U | 0.21 | U | 0.25 | U |

ANALYTICAL RESULTS FROM PLUME 3/4 MONITORING WELLS

| Date | MW-9A | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1, 1 - DCA | | 1, 1 - DCE | | PCE | | 1, 1, 1 - TCA | | TCE | |
| MCL/ES/PAL Limitations | None/850/85 | | 7/7/0.7 | | 5/5/0.5 | | 200/200/40 | | 5/5/0.5 | |
| 1/88 | 0.25 | U | 2.0 | J | 0.355 | U | 55 | | 0.22 | U |
| 5/90 | 0.2 | U | 1 | | 0.2 | U | 56 | | 0.2 | U |
| 02/08/94 | 0.1 | | 1 | | 0.1 | | 60 | | 0.18 | ND |
| 03/28/94 | 0.18 | ND | 0.18 | ND | 0.18 | ND | 25 | | 0.18 | ND |
| 06/06/94 | 0.18 | ND | 0.18 | ND | 0.18 | ND | 34 | | 0.18 | ND |
| 08/23/94 | 0.18 | ND | 0.18 | ND | 0.18 | ND | 15 | | 0.18 | ND |
| 10/27/94 | 0.18 | ND | 0.18 | ND | 0.18 | ND | 20 | | 0.18 | ND |
| 05/02/96 | 0.18 | ND | 0.18 | ND | 0.18 | ND | 11 | | 0.18 | ND |
| 07/08/96 | 0.18 | U | 0.21 | U | 0.9 | U | 0.5 | | 0.08 | U |
| 10/01/96 | 0.18 | U | 0.21 | U | 0.9 | U | 13 | | 0.08 | U |
| 03/17/97 | 0.04 | U | 0.09 | U | 0.11 | U | 21 | | 0.06 | U |
| 05/19/97 | 0.04 | U | 0.09 | U | 0.11 | U | 7.78 | | 0.06 | U |
| 07/21/97 | 0.18 | U | 0.18 | U | 0.18 | U | 11.3 | | 0.18 | ND |
| 10/22/97 | 0.2 | U | 0.25 | U | 0.3 | U | 5.65 | | 0.2 | U |
| 01/27/98 | 0.1 | U | 0.1 | U | 0.1 | U | 3.61 | | 0.18 | U |
| 04/20/98 | 0.1 | U | 0.1 | U | 0.1 | U | 9.61 | | 0.18 | U |
| 07/21/98 | 0.1 | U | 0.1 | U | 0.1 | U | 7.74 | | 0.18 | U |
| 10/27/98 | 0.1 | U | 0.1 | U | 0.1 | U | 0.342 | | 0.18 | U |
| 01/19/99 | 0.1 | U | 0.1 | U | 0.1 | U | 1.95 | | 0.18 | U |
| 04/13/99 | 0.1 | U | 0.1 | U | 0.1 | U | 1.27 | | 0.18 | U |
| 07/27/99 | 0.05 | U | 0.075 | U | 0.075 | U | 0.39 | J | 0.2 | U |
| 10/05/99 | 0.075 | U | 0.075 | U | 0.075 | U | 0.075 | U | 0.247 | J |
| 02/01/00 | 0.075 | U | 0.075 | U | 0.075 | U, CSL | 0.075 | U | 0.2 | U |
| 05/25/00 | 0.075 | U | 0.075 | U, CSH | 0.075 | U | 0.418 | J | 0.2 | U |
| 07/17/00 | 0.075 | U | 0.075 | U | 0.075 | U | 0.075 | U | 0.2 | U |
| 10/11/00 | 0.075 | U, SPH | 0.075 | U | 0.075 | U | 0.075 | U | 0.2 | U |
| 01/23/01 | 0.075 | U | 0.075 | U | 0.075 | U | 0.075 | U, SPH | 0.2 | U, SPH |
| 05/08/01 | 0.075 | U | 0.075 | U | 0.075 | U | 0.075 | U | 0.2 | U |
| 07/16/01 | 0.19 | U | 0.19 | U | 0.13 | U | 0.1 | U | 0.13 | U, CSH |
| 10/16/01 | 0.19 | U | 0.19 | U | 0.13 | U | 0.1 | U | 0.13 | U |
| 01/08/02 | 0.19 | U | 0.19 | U | 0.13 | U | 0.1 | U | 0.13 | U |
| 04/22/02 | 0.18 | U | 0.195 | U | 0.16 | U | 0.21 | U | 0.18 | U |
| 07/09/02 | 0.18 | U | 0.195 | U | 0.16 | U | 0.21 | U | 0.18 | U |
| 10/22/02 | 0.18 | U | 0.195 | U | 0.16 | U | 0.21 | U | 0.18 | U |
| 01/06/03 | 0.18 | U | 0.195 | U | 0.16 | U | 0.21 | U | 0.18 | U |

ANALYTICAL RESULTS FROM PLUME 3/4 MONITORING WELLS

| Date | MW-9B | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1, 1 - DCA | | 1, 1 - DCE | | PCE | | 1, 1, 1 - TCA | | TCE | |
| MCL/ES/PAL Limitations | None/850/85 | | 7/7/0.7 | | 5/5/0.5 | | 200/200/40 | | 5/5/0.5 | |
| 10/88 | 0.26 | | 0.145 | U | 0.14 | J | 7.5 | | 0.2 | J |
| 5/90 | 0.1 | U | 0.2 | J | 0.1 | U | 4 | | 0.1 | U |
| 02/08/94 | 0.18 | ND | 0.18 | ND | 0.04 | | 0.8 | | 0.1 | |
| 03/28/94 | 0.18 | ND | 0.18 | ND | 0.18 | ND | 3.8 | | 0.18 | ND |
| 06/06/94 | 0.18 | ND | 0.18 | ND | 0.18 | ND | 4.3 | | 0.18 | ND |
| 08/23/94 | 0.18 | ND | 0.18 | ND | 0.18 | ND | 2.9 | | 0.18 | ND |
| 10/27/94 | 0.18 | ND | 0.18 | ND | 0.18 | ND | 3.8 | | 0.18 | ND |
| 07/08/96 | 0.18 | U | 0.21 | U | 0.9 | U | 0.15 | U | 0.08 | U |
| 10/01/96 | 0.18 | U | 0.21 | U | 0.9 | U | 0.36 | J | 0.08 | U |
| 04/01/97 | 0.04 | U | 0.09 | U | 0.11 | U | 8.89 | | 0.06 | U |
| 05/19/97 | 0.04 | U | 0.09 | U | 0.11 | U | 1.76 | | 0.06 | U |
| 07/21/97 | 0.04 | U | 0.09 | U | 0.11 | U | 0.3 | J | 0.06 | U |
| 10/22/97 | 0.2 | U | 0.25 | U | 0.3 | U | 0.7 | | 0.2 | U |
| 01/27/98 | 0.1 | U | 0.1 | U | 0.1 | U | 0.519 | | 0.18 | U |
| 04/20/98 | 0.1 | U | 0.1 | U | 0.1 | U | 0.478 | | 0.18 | U |
| 07/21/98 | 0.1 | U | 0.1 | U | 0.1 | U | 0.1 | U | 0.18 | U |
| 10/27/98 | 0.1 | U | 0.1 | U | 0.1 | U | 0.1 | U | 0.18 | U |
| 01/19/99 | 0.1 | U | 0.1 | U | 0.1 | U | 0.1 | U | 0.18 | U |
| 04/13/99 | 0.1 | U | 0.1 | U | 0.1 | U | 0.1 | U | 0.18 | U |
| 07/27/99 | 0.05 | U | 0.075 | U | 0.075 | U | 0.1 | U | 0.2 | U |
| 10/05/99 | 0.075 | U | 0.075 | U | 0.075 | U | 0.075 | U | 0.05 | U |
| 02/01/00 | 0.075 | U | 0.075 | U | 0.075 | U, CSL | 0.075 | U | 0.2 | U |
| 05/25/00 | 0.075 | U | 0.075 | U, CSH | 0.075 | U | 0.075 | U | 0.2 | U |
| 07/17/00 | 0.075 | U | 0.075 | U | 0.075 | U | 0.075 | U | 0.2 | U |
| 10/11/00 | 0.075 | U, SPH | 0.075 | U | 0.075 | U | 0.075 | U | 0.2 | U |
| 01/23/01 | 0.075 | U | 0.075 | U | 0.075 | U | 0.075 | U, SPH | 0.2 | U, SPH |
| 05/08/01 | 0.075 | U | 0.075 | U | 0.075 | U | 0.075 | U | 0.2 | U |
| 07/16/01 | 0.19 | U | 0.19 | U | 0.13 | U | 0.1 | U | 0.13 | U, CSH |
| 10/16/01 | 0.19 | U | 0.19 | U | 0.13 | U | 0.1 | U | 0.13 | U |
| 01/09/02 | 0.19 | U | 0.19 | U | 0.13 | U | 0.1 | U | 0.13 | U |
| 04/22/02 | 0.18 | U | 0.195 | U | 0.16 | U | 0.21 | U | 0.18 | U |
| 07/09/02 | 0.18 | U | 0.195 | U | 0.16 | U | 0.21 | U | 0.18 | U |
| 10/22/02 | 0.18 | U | 0.195 | U | 0.16 | U | 0.21 | U | 0.18 | U |
| 01/06/03 | 0.18 | U | 0.195 | U | 0.16 | U | 0.21 | U | 0.18 | U |

ANALYTICAL RESULTS FROM PLUME 3/4 MONITORING WELLS

| Date | MW-12A | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1, 1 - DCA | | 1, 1 - DCE | | PCE | | 1, 1, 1 - TCA | | TCE | |
| MCL/ES/PAL Limitations | None/850/85 | | 7/7/0.7 | | 5/5/0.5 | | 200/200/40 | | 5/5/0.5 | |
| 01/01/88 | 0.12 | U | 0.12 | U | 0.075 | U | 0.075 | U | 0.075 | U |
| 10/01/88 | 0.12 | U | 0.145 | U | 0.17 | U | 0.44 | J | 0.105 | U |
| 04/13/05 | 0.25 | U | 0.25 | U | 0.225 | U | 0.21 | U | 0.25 | U |
| 07/12/05 | 0.25 | U | 0.25 | U | 0.225 | U | 0.21 | U | 0.25 | U |

ANALYTICAL RESULTS FROM PLUME 3/4 MONITORING WELLS

| Date | MW-12B | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1, 1 - DCA | | 1, 1 - DCE | | PCE | | 1, 1, 1 - TCA | | TCE | |
| MCL/ES/PAL Limitations | None/850/85 | | 7/7/0.7 | | 5/5/0.5 | | 200/200/40 | | 5/5/0.5 | |
| 01/01/88 | 0.12 | U | 0.12 | U | 0.075 | U | 0.075 | U | 0.075 | U |
| 10/01/88 | 0.12 | U | 0.145 | U | 0.17 | U | 0.22 | J | 0.105 | U |
| 04/13/05 | 0.25 | U | 0.25 | U | 0.225 | U | 0.21 | U | 0.25 | U |
| 07/12/05 | 0.25 | U | 0.25 | U | 0.225 | U | 0.21 | U | 0.25 | U |

ANALYTICAL RESULTS FROM PLUME 3/4 MONITORING WELLS

| Date | MW-13A | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1, 1 - DCA | | 1, 1 - DCE | | PCE | | 1, 1, 1 - TCA | | TCE | |
| MCL/ES/PAL Limitations | None/850/85 | | 7/7/0.7 | | 5/5/0.5 | | 200/200/40 | | 5/5/0.5 | |
| 1/88 | 0.12 | U | 0.12 | U | 0.075 | U | 0.3 | | 0.5 | |
| 10/88 | 0.12 | U | 0.145 | U | 0.17 | U | 0.43 | J | 0.75 | |
| 4/91 | 0.1 | ND | | ND | 0.1 | ND | 0.1 | ND | 0.18 | ND |
| 10/27/94 | 0.1 | ND | | ND | 0.1 | ND | 0.1 | ND | 0.18 | ND |
| 04/19/95 | 0.1 | ND | | ND | 0.1 | ND | 0.1 | ND | 0.18 | ND |
| 10/09/95 | 0.1 | ND | | ND | 0.1 | ND | 0.1 | ND | 0.18 | ND |
| 04/17/96 | 0.1 | ND | | ND | 0.1 | ND | 0.22 | | 0.18 | ND |
| 10/01/96 | 0.1 | ND | 0.1 | ND | 0.18 | | 0.29 | | 0.16 | |
| 05/20/97 | 0.1 | ND | 0.1 | ND | 0.1 | ND | 0.18 | | 0.18 | ND |
| 10/22/97 | 0.2 | U | 0.25 | U | 0.3 | U | 0.35 | U | 0.2 | U |
| 04/21/98 | 0.1 | U | 0.1 | U | 0.1 | U | 0.268 | | 0.18 | U |
| 10/27/98 | 0.1 | U | 0.1 | U | 0.1 | U | 0.1 | U | 0.18 | U |
| 07/12/05 | 0.25 | U | 0.25 | U | 0.225 | U | 0.21 | U | 0.25 | U |

ANALYTICAL RESULTS FROM PLUME 3/4 MONITORING WELLS

| Date | MW-13B | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1, 1 - DCA | | 1, 1 - DCE | | PCE | | 1, 1, 1 - TCA | | TCE | |
| MCL/ES/PAL Limitations | None/850/85 | | 7/7/0.7 | | 5/5/0.5 | | 200/200/40 | | 5/5/0.5 | |
| 01/01/88 | 0.5 | | 0.12 | U | 0.075 | U | 0.075 | U | 0.075 | U |
| 10/01/88 | 0.38 | | 0.145 | U | 0.17 | U | 0.18 | J | 0.44 | |
| 04/13/05 | 0.25 | U | 0.25 | U | 0.225 | U | 0.21 | U | 0.25 | U |
| 07/12/05 | 0.25 | U | 0.25 | U | 0.225 | U | 0.21 | U | 0.25 | U |

ANALYTICAL RESULTS FROM PLUME 3/4 MONITORING WELLS

| Date | MW-29B | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1, 1 - DCA | | 1, 1 - DCE | | PCE | | 1, 1, 1 - TCA | | TCE | |
| MCL/ES/PAL Limitations | None/850/85 | | 7/7/0.7 | | 5/5/0.5 | | 200/200/40 | | 5/5/0.5 | |
| 07/21/89 | 16 | | **3** | | **0.9** | | **50** | | **1** | |
| 05/25/90 | 13 | | **2** | | **0.6** | | 33 | | **0.7** | |
| 04/16/99 | 1.67 | | 0.35 | J | 0.308 | | 5.53 | | **0.661** | CSH, J |
| 10/07/99 | 1.33 | | 0.184 | J | 0.184 | J, Dup | 4.52 | | **0.579** | |
| 05/23/00 | 0.204 | J | 0.075 | U, CSH | 0.075 | U | 0.587 | | 0.2 | U |
| 10/13/00 | 0.579 | | 0.075 | U | 0.075 | U | 2.19 | | 0.491 | |
| 05/09/01 | 0.285 | J | 0.075 | U | 0.16 | J | 1.49 | | **0.598** | J |
| 10/18/01 | 0.19 | U | 0.19 | U | 0.13 | U | 0.767 | | **0.616** | J |
| 04/22/02 | 0.18 | U | 0.195 | U | 0.16 | U | 1.46 | | **0.561** | J |
| 10/23/02 | 0.18 | U | 0.195 | U | 0.16 | U, Dup | 0.922 | J | **0.635** | J |
| 04/09/03 | 0.18 | U | 0.195 | U | 0.16 | U | 0.21 | U | **0.576** | J |
| 10/07/03 | 0.18 | U | 0.195 | U | 0.16 | U | 0.542 | J | **0.521** | J |
| 04/13/04 | 0.25 | U | 0.25 | U | 0.225 | U, S1L | 0.21 | U | 0.25 | U, S2L |
| 10/19/04 | 0.25 | U | 0.25 | U | 0.225 | U | 0.425 | J | **0.632** | J |
| 04/12/05 | 0.25 | U | 0.25 | U | 0.225 | U | 0.21 | U | 0.25 | U |
| 10/11/05 | 0.25 | U | 0.25 | U | 0.225 | U | 0.21 | U | 0.25 | U |
| 04/18/06 | 0.25 | U | 0.25 | U | 0.225 | U | 0.21 | U | 0.25 | U |
| 10/18/06 | 0.075 | U | 0.075 | U | 0.12 | J | 0.10 | U | **0.68** | |

ANALYTICAL RESULTS FROM PLUME 3/4 MONITORING WELLS

| Date | MW-62A | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1, 1 - DCA | | 1, 1 - DCE | | PCE | | 1, 1, 1 - TCA | | TCE | |
| MCL/ES/PAL Limitations | None/850/85 | | 7/7/0.7 | | 5/5/0.5 | | 200/200/40 | | 5/5/0.5 | |
| 7/92 | 34 | | 1 | | 2 | | 130 | | 0.1 | U |
| 02/08/94 | 22 | | 0.5 | U | 0.9 | | 120 | | 0.3 | |
| 03/28/94 | 21 | | 2.5 | | 2.5 | | 99 | | 2.5 | |
| 06/06/94 | 19 | | 2 | | 2 | | 120 | | 2 | |
| 08/23/94 | 22 | | 0.5 | U | 0.5 | U | 110 | | 0.5 | U |
| 10/27/94 | 9.1 | | 0.5 | U | 1.2 | | 91 | | 0.5 | U |
| 01/19/95 | 8.3 | | 2.1 | | 2.1 | | 93 | | 0.5 | U |
| 04/19/95 | 2.3 | | 0.5 | U | 1.5 | | 46 | | 0.5 | U |
| 07/18/95 | 0.5 | U | 0.5 | U | 0.5 | U | 30 | | 0.5 | U |
| 10/09/95 | 1.5 | | 2.4 | | 1.2 | | 45 | | 0.5 | U |
| 01/08/96 | 1.2 | | 1.1 | | 1.2 | | 32 | | 0.5 | U |
| 04/17/96 | 0.84 | | 0.64 | | 1.1 | | 27 | | 0.105 | U |
| 07/08/96 | 0.46 | | 0.53 | | 1.6 | | 15 | | 0.08 | U |
| 10/01/96 | 0.72 | | 0.77 | | 1 | | 22 | | 0.08 | U |
| 05/19/97 | 0.17 | | 0.23 | | 0.44 | | 13.1 | | 0.06 | U |
| 10/21/97 | 0.713 | | 0.25 | U | 0.3 | U | 10.9 | | 0.2 | U |
| 04/20/98 | 0.1 | U | 0.1 | U | 0.1 | U | 15.3 | | 0.18 | U |
| 04/14/99 | 0.226 | CSH, J | 0.2 | | 0.234 | J | 9.7 | | 0.36 | MSH |
| 04/08/03 | 0.18 | U | 0.195 | U | 0.16 | U | 0.21 | U | 0.18 | U |
| 10/07/03 | 0.18 | U | 0.195 | U | 0.16 | U | 0.21 | U | 0.18 | U |
| 04/12/04 | 0.25 | U | 0.25 | U | 0.225 | U | 0.21 | U | 0.25 | U |
| 10/18/04 | 0.25 | U | 0.25 | U | 0.225 | U | 0.21 | U | 0.25 | U |
| 04/13/05 | 0.25 | U | 0.25 | U | 0.225 | U | 0.21 | U | 0.25 | U |
| 07/13/05 | 0.25 | U | 0.25 | U | 0.225 | U | 0.21 | U | 0.25 | U |
| 07/25/06 | 0.25 | U | 0.25 | U | 0.355 | U | 0.48 | J | 0.25 | U |

ANALYTICAL RESULTS FROM PLUME 3/4 MONITORING WELLS

| Date | MW-62B | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1, 1 - DCA | | 1, 1 - DCE | | PCE | | 1, 1, 1 - TCA | | TCE | |
| MCL/ES/PAL Limitations | None/850/85 | | 7/7/0.7 | | 5/5/0.5 | | 200/200/40 | | 5/5/0.5 | |
| 7/92 | 46 | | 0.8 | | 2 | | 66 | | 0.25 | U |
| 02/08/94 | 19 | | 0.3 | | 1 | | 34 | | 0.2 | |
| 03/28/94 | 17 | | 0.5 | U | 1.3 | | 29 | | 0.5 | U |
| 06/06/94 | 13 | | 0.5 | U | 0.5 | U | 19 | | 0.5 | U |
| 08/23/94 | 6.7 | | 0.5 | U | 0.5 | U | 14 | | 0.5 | U |
| 10/27/94 | 4 | | 0.5 | U | 0.5 | U | 7.8 | | 0.5 | U |
| 01/19/95 | 0.5 | U | 0.5 | U | 0.5 | U | 2.7 | | 0.5 | U |
| 04/19/95 | 0.5 | U | 0.5 | U | 0.5 | U | 2.3 | | 0.5 | U |
| 07/18/95 | 0.5 | U | 0.5 | U | 0.5 | U | 1.7 | | 0.5 | U |
| 10/09/95 | 0.5 | U | 0.5 | U | 0.5 | U | 0.5 | U | 0.5 | U |
| 01/08/96 | 0.5 | U | 0.5 | U | 0.5 | U | 2 | | 0.5 | U |
| 04/17/96 | 0.36 | | 0.245 | U | 0.18 | | 2.5 | | 0.18 | ND |
| 07/08/96 | 0.175 | U | 0.205 | U | 0.09 | U | 1.2 | | 0.19 | |
| 10/01/96 | 0.175 | U | 0.205 | U | 0.09 | U | 0.45 | | 0.25 | |
| 05/19/97 | 0.04 | U | 0.085 | U | 0.11 | U | 0.3 | | 0.15 | |
| 10/21/97 | 0.2 | U | 0.25 | U | 0.3 | U | 0.828 | | 0.2 | U |
| 04/20/98 | 0.1 | U | 0.1 | U | 0.1 | U | 0.826 | | 0.18 | U |
| 10/27/98 | 0.1 | U | 0.1 | U | 0.1 | U | 0.561 | | 0.18 | U |
| 04/14/99 | 0.2 | CSH, MSH | 0.2 | | 0.2 | | 0.202 | J | 0.36 | CSH |
| 04/08/03 | 0.18 | U | 0.195 | U | 0.16 | U | 0.21 | U | 0.18 | U |
| 10/07/03 | 0.18 | U | 0.195 | U | 0.16 | U | 0.21 | U | 0.18 | U |
| 07/14/04 | 0.25 | U | 0.25 | U | 0.225 | U | 0.21 | U | 0.25 | U |
| 04/13/05 | 0.25 | U | 0.25 | U | 0.225 | U | 0.21 | U | 0.25 | U |
| 07/13/05 | 0.25 | U | 0.25 | U | 0.225 | U | 0.21 | U | 0.25 | U |
| 07/25/06 | 0.25 | U | 0.25 | U | 0.355 | U | 0.59 | J | 0.25 | U |

ANALYTICAL RESULTS FROM PLUME 3/4 MONITORING WELLS

| Date | MW-62C | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1, 1 - DCA | | 1, 1 - DCE | | PCE | | 1, 1, 1 - TCA | | TCE | |
| MCL/ES/PAL Limitations | None/850/85 | | 7/7/0.7 | | 5/5/0.5 | | 200/200/40 | | 5/5/0.5 | |
| 7/92 | 0.9 | | 0.5 | | 0.15 | U | 3 | | 0.1 | U |
| 02/08/94 | 0.2 | | 0.5 | U | 0.09 | | 1 | | 0.1 | |
| 03/28/94 | 0.5 | U | 0.5 | U | 0.5 | U | 0.5 | U | 0.5 | U |
| 06/06/94 | 0.5 | U | 0.5 | U | 0.5 | U | 3.2 | | 0.5 | U |
| 08/23/94 | 0.5 | U | 0.5 | U | 0.5 | U | 6.2 | | 0.5 | U |
| 10/27/94 | 0.5 | U | 0.5 | U | 0.5 | U | 3.8 | | 0.5 | U |
| 01/19/95 | 0.5 | U | 0.5 | U | 0.5 | U | 0.5 | U | 0.5 | U |
| 04/19/95 | 0.5 | U | 0.5 | U | 0.5 | U | 0.5 | U | 0.5 | U |
| 07/18/95 | 0.5 | U | 0.5 | U | 0.5 | U | 0.5 | U | 0.5 | U |
| 09/12/95 | 0.5 | U | 0.5 | U | 0.5 | U | 4.1 | | 0.5 | U |
| 01/08/96 | 0.5 | U | 0.5 | U | 0.5 | U | 0.5 | U | 0.5 | U |
| 04/17/96 | 0.48 | | 0.245 | U | 0.19 | | 1.5 | | 0.105 | U |
| 07/08/96 | 0.175 | U | 0.205 | U | 0.09 | U | 0.145 | U | 0.08 | U |
| 10/01/96 | 0.175 | U | 0.205 | U | 0.09 | U | 0.145 | U | 0.08 | U |
| 05/19/97 | 0.04 | U | 0.08 | | 0.11 | U | 1.13 | | 0.06 | U |
| 10/21/97 | 0.2 | U | 0.25 | U | 0.3 | U | 0.35 | U | 0.2 | U |
| 04/20/98 | 0.1 | U | 0.1 | U | 0.1 | U | 0.1 | U | 0.18 | U |
| 10/26/98 | 0.1 | U | 0.1 | U | 0.1 | U | 0.1 | U | 0.18 | U |
| 04/14/99 | 0.1 | U | 0.1 | U | 0.1 | U | 0.1 | U | 0.18 | U |
| 07/22/03 | 0.18 | U | 0.195 | U | 0.16 | U | 0.21 | U | 0.18 | U |
| 07/14/04 | 0.25 | U | 0.25 | U | 0.225 | U | 0.21 | U | 0.25 | U |
| 07/13/05 | 0.25 | U | 0.25 | U | 0.225 | U | 0.21 | U | 0.25 | U |
| 07/25/06 | 0.25 | U | 0.25 | U | 0.355 | U | 0.21 | U | 0.25 | U |

**Gannett Fleming**

ANALYTICAL RESULTS FROM PLUME 3/4 MONITORING WELLS

| Date | MW-63A | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1, 1 - DCA | | 1, 1 - DCE | | PCE | | 1, 1, 1 - TCA | | TCE | |
| MCL/ES/PAL Limitations | None/850/85 | | 7/7/0.7 | | 5/5/0.5 | | 200/200/40 | | 5/5/0.5 | |
| 7/92 | **140** | | **1** | | **4** | | **130** | | 0.1 | U |
| 02/08/94 | 79 | | 0.6 | | **3** | | **100** | | 0.4 | |
| 03/28/94 | 10 | | 0.18 | ND | 0.18 | ND | 17 | | 0.18 | ND |
| 06/06/94 | 26 | | 0.18 | ND | **1.7** | | **49** | | 0.18 | ND |
| 08/23/94 | 2.7 | | 0.18 | ND | 0.18 | ND | 7.4 | | 0.18 | ND |
| 10/27/94 | 9.9 | | 0.18 | ND | 0.18 | ND | 26 | | 0.18 | ND |
| 01/19/95 | 4.7 | | 0.18 | ND | 0.18 | ND | 0.18 | ND | 0.18 | ND |
| 04/19/95 | 2.3 | | 0.18 | ND | 0.18 | ND | 0.18 | ND | 0.18 | ND |
| 07/18/95 | 5.6 | | 0.18 | ND | 0.18 | ND | 24 | | 0.18 | ND |
| 09/12/95 | 12 | | 0.18 | ND | **1** | | 34 | | 0.18 | ND |
| 01/08/96 | 6.8 | | 0.18 | ND | 0.18 | ND | 15 | | 0.18 | ND |
| 04/17/96 | 4.6 | | 0.18 | ND | **0.68** | | 13 | | 0.18 | ND |
| 07/08/96 | 1.6 | | 0.18 | ND | 0.23 | | 4.7 | | 0.18 | ND |
| 10/01/96 | 3.3 | | 0.18 | ND | 0.47 | | 7.8 | | 0.18 | ND |
| 03/17/97 | 2.95 | | 0.18 | ND | 0.18 | ND | 11.7 | | 0.18 | ND |
| 05/19/97 | 0.18 | ND | **0.94** | | 0.18 | ND | 3.76 | | 0.18 | ND |
| 07/21/97 | 7.22 | | 0.18 | ND | **0.65** | | 23.8 | | 0.18 | ND |
| 10/21/97 | 3.94 | | 0.25 | U | **0.3** | **U** | 10.1 | | 0.2 | U |
| 01/27/98 | 2.19 | | 0.1 | U | 0.266 | | 6.29 | | 0.18 | U |
| 04/20/98 | 0.1 | U | 0.1 | U | 0.225 | | 0.1 | U | 0.18 | U |
| 07/21/98 | 16 | | 0.1 | U | **1.77** | | 22.9 | | 0.18 | U |
| 10/26/98 | 7.29 | | 0.1 | U | **1.07** | | 16.2 | | 0.18 | U |
| 01/19/99 | 2.58 | | 0.1 | U | **0.651** | **J** | 12.1 | | 0.18 | U |
| 04/14/99 | 0.528 | J | 0.1 | U | 0.316 | J | 6.1 | | 0.18 | U |
| 07/27/99 | 0.05 | U | 0.075 | U | 0.182 | J | 1.73 | | 0.2 | U |
| 10/06/99 | 0.075 | U | 0.075 | U | 0.075 | U | 0.377 | J | 0.05 | U |
| 02/01/00 | 0.075 | U | 0.075 | U | 0.075 | U | 0.075 | U | 0.2 | U |
| 05/25/00 | 0.075 | U | 0.075 | U, CSH | 0.075 | U | 0.075 | U | 0.2 | U |
| 07/17/00 | 0.075 | U | 0.075 | U | 0.075 | U | 0.075 | U | 0.2 | U |
| 10/10/00 | 0.075 | U, SPH | 0.075 | U | 0.075 | U | 0.075 | U | 0.2 | U |
| 01/23/01 | 0.075 | U | 0.075 | U | 0.075 | U | 0.075 | U,SPH | 0.2 | U, SPH |
| 05/08/01 | 0.075 | U | 0.075 | U | 0.075 | U | 0.075 | U | 0.2 | U, CSL |
| 07/16/01 | 0.19 | U | 0.19 | U | 0.13 | U | 0.2 | J | 0.13 | U, CSH |
| 10/16/01 | 0.19 | U | 0.19 | U | 0.13 | U | 0.1 | U | 0.13 | U |
| 01/08/02 | 0.19 | U | 0.19 | U | 0.13 | U | 0.1 | U | 0.13 | U |
| 04/22/02 | 0.18 | U | 0.195 | U | 0.16 | U | 0.21 | U | 0.18 | U |
| 07/09/02 | 0.18 | U | 0.195 | U | 0.16 | U | 0.21 | U | 0.18 | U |
| 10/22/02 | 0.18 | U | 0.195 | U | 0.16 | U | 0.21 | U | 0.18 | U |
| 01/06/03 | 0.18 | U | 0.195 | U | 0.16 | U | 0.21 | U | 0.18 | U |
| 04/08/03 | 0.18 | U | 0.195 | U | 0.16 | U | 0.21 | U | 0.18 | U |
| 07/22/03 | 0.18 | U | 0.195 | U, CSL | 0.16 | U | 0.21 | U | 0.18 | U |
| 07/14/04 | 0.25 | U | 0.25 | U | 0.225 | U | 0.21 | U | 0.25 | U |
| 04/13/05 | 0.25 | U | 0.25 | U | 0.225 | U | 0.21 | U | 0.25 | U |
| 07/11/05 | 0.25 | U | 0.25 | U | 0.225 | U | 0.21 | U | 0.25 | U |

ANALYTICAL RESULTS FROM PLUME 3/4 MONITORING WELLS

| Date | MW-63B | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1, 1 - DCA | | 1, 1 - DCE | | PCE | | 1, 1, 1 - TCA | | TCE | |
| MCL/ES/PAL Limitations | None/850/85 | | 7/7/0.7 | | 5/5/0.5 | | 200/200/40 | | 5/5/0.5 | |
| 7/92 | 0.1 | U | 0.15 | U | 0.15 | U | 0.8 | J | 0.1 | U |
| 02/08/94 | 2 | | 0.5 | U | 0.2 | | 6 | | 0.08 | |
| 03/28/94 | 0.5 | U | 0.5 | U | 0.5 | U | 3 | | 0.5 | U |
| 06/06/94 | 3.3 | | 0.5 | U | 0.5 | U | 10 | | 0.5 | U |
| 08/23/94 | 0.5 | U | 0.5 | U | 0.5 | U | 0.5 | U | 0.5 | U |
| 10/27/94 | 0.5 | U | 0.5 | U | 0.5 | U | 1.5 | | 0.5 | U |
| 01/19/95 | 0.5 | U | 0.5 | U | 0.5 | U | 0.5 | U | 0.5 | U |
| 04/19/95 | 0.5 | U | 0.5 | U | 0.5 | U | 3.4 | | 0.5 | U |
| 07/18/95 | 0.5 | U | 0.5 | U | 0.5 | U | 0.5 | U | 0.5 | U |
| 09/12/95 | 0.5 | U | 0.5 | U | 0.5 | U | 0.5 | U | 0.5 | U |
| 01/08/96 | 0.5 | U | 0.5 | U | 0.5 | U | 0.5 | U | 0.5 | U |
| 04/17/96 | 0.14 | U | 0.245 | U | 0.075 | U | 0.42 | | 0.105 | U |
| 07/08/96 | 0.175 | U | 0.205 | U | 0.09 | U | 0.145 | U | 0.08 | U |
| 10/01/96 | 0.175 | U | 0.205 | U | 0.09 | U | 0.3 | | 0.08 | U |
| 05/19/97 | 0.04 | U | 0.23 | | 0.11 | U | 0.93 | | 0.06 | U |
| 10/21/97 | .4/2 | U | 0.25 | U | 0.3 | U | 0.35 | U | 0.2 | U |
| 04/20/98 | 0.1 | U | 0.1 | U | 0.1 | U | 0.1 | U | 0.18 | U |
| 04/14/99 | 0.1 | U | 0.1 | U | 0.1 | U | 0.1 | U | 0.18 | U |
| 07/22/03 | 0.18 | U | 0.195 | U, CSL | 0.16 | U | 0.21 | U | 0.18 | U |

ANALYTICAL RESULTS FROM PLUME 3/4 MONITORING WELLS

| Date | MW-64A | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1, 1 - DCA | | 1, 1 - DCE | | PCE | | 1, 1, 1 - TCA | | TCE | |
| MCL/ES/PAL Limitations | None/850/85 | | 7/7/0.7 | | 5/5/0.5 | | 200/200/40 | | 5/5/0.5 | |
| 12/19/91 | 0.1 | U | 0.15 | U | 0.15 | U | 2 | | 0.1 | U |
| 7/92 | 0.1 | U | 0.15 | U | 0.15 | U | 2 | | 0.1 | U |
| 02/08/94 | 0.5 | U | 0.5 | U | 0.5 | U | 2 | | 0.05 | U |
| 03/28/94 | 0.5 | U | 0.5 | U | 0.5 | U | 2.1 | | 0.5 | U |
| 06/06/94 | 0.5 | U | 0.5 | U | 0.5 | U | 1.7 | | 0.5 | U |
| 08/23/94 | 0.5 | U | 0.5 | U | 0.5 | U | 2.1 | | 0.5 | U |
| 10/27/94 | 0.5 | U | 0.5 | U | 0.5 | U | 1.4 | | 0.5 | U |
| 01/19/95 | 0.5 | U | 0.5 | U | 0.5 | U | 1.3 | | 0.5 | U |
| 04/19/95 | 0.5 | U | 0.5 | U | 0.5 | U | 15 | | 0.5 | U |
| 07/18/95 | 0.5 | U | 0.5 | U | 0.5 | U | 1.2 | | 0.5 | U |
| 09/12/95 | 0.5 | U | 0.5 | U | 0.5 | U | 0.5 | U | 0.5 | U |
| 01/08/96 | 0.5 | U | 0.5 | U | 0.5 | U | 1.4 | | 0.5 | U |
| 04/17/96 | 0.14 | U | 0.245 | U | 0.075 | U | 1.4 | | 0.105 | U |
| 07/08/96 | 0.175 | U | 0.205 | U | 0.09 | U | 1.3 | | 0.08 | U |
| 10/01/96 | 0.175 | U | 0.205 | U | 0.09 | U | 1.3 | | 0.08 | U |
| 05/19/97 | 0.04 | U | 0.085 | U | 0.11 | U | 1.3 | | 0.06 | U |
| 10/22/97 | 0.2 | U | 0.25 | U | 0.3 | U | 0.977 | | 0.2 | U |
| 04/21/98 | 0.1 | U | 0.1 | U | 0.1 | U | 1.09 | | 0.18 | U |
| 10/26/98 | 0.1 | U | 0.1 | U | 0.1 | U | 0.464 | | 0.18 | U |
| 04/13/99 | 0.2 | U | 0.2 | U | 0.2 | U | 0.587 | J | 0.18 | U |
| 07/21/03 | 0.18 | U | 0.195 | U | 0.16 | U | 0.21 | U | 0.18 | U |

ANALYTICAL RESULTS FROM PLUME 3/4 MONITORING WELLS

| Date | MW-64B | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1, 1 - DCA | | 1, 1 - DCE | | PCE | | 1, 1, 1 - TCA | | TCE | |
| MCL/ES/PAL Limitations | None/850/85 | | 7/7/0.7 | | 5/5/0.5 | | 200/200/40 | | 5/5/0.5 | |
| 12/19/91 | 0.1 | U | 0.15 | U | 0.15 | U | 0.45 | U | 0.1 | U |
| 7/92 | 0.1 | U | 0.15 | U | 0.15 | U | 0.45 | U | 0.1 | U |
| 02/08/94 | 0.18 | ND | 0.18 | ND | 0.04 | | 0.6 | | 0.3 | |
| 03/28/94 | 0.18 | ND | 0.18 | ND | 0.18 | ND | 0.18 | ND | 0.18 | ND |
| 06/06/94 | 0.18 | ND | 0.18 | ND | 0.18 | ND | 0.18 | ND | 0.18 | ND |
| 08/23/94 | 0.18 | ND | 0.18 | ND | 0.18 | ND | 0.18 | ND | 0.18 | ND |
| 10/27/94 | 0.18 | ND | 0.18 | ND | 0.18 | ND | 1 | | 0.18 | ND |
| 01/19/95 | 0.18 | ND | 0.18 | ND | 0.18 | ND | 0.18 | ND | **1** | |
| 04/19/95 | 0.18 | ND | 0.18 | ND | 0.18 | ND | 0.18 | ND | **1.8** | |
| 07/18/95 | 0.18 | ND | 0.18 | ND | 0.18 | ND | 0.18 | ND | **1.1** | |
| 09/12/95 | 0.18 | ND | 0.18 | ND | 0.18 | ND | 0.18 | ND | 0.18 | ND |
| 01/08/96 | 0.18 | ND | 0.18 | ND | 0.18 | ND | 0.18 | ND | **1.9** | |
| 04/17/96 | 0.18 | ND | 0.18 | ND | 0.18 | ND | 0.18 | ND | **2.7** | |
| 07/08/96 | 0.18 | ND | 0.18 | ND | 0.18 | ND | 0.18 | ND | 0.18 | ND |
| 10/01/96 | 0.18 | ND | 0.18 | ND | 0.18 | ND | 0.18 | ND | **2** | |
| 05/19/97 | 0.18 | ND | 0.18 | ND | 0.18 | ND | 0.18 | ND | 0.16 | |
| 10/22/97 | 0.2 | U | 0.25 | U | 0.3 | U | 0.35 | U | **2.23** | |
| 04/21/98 | 0.1 | U | 0.1 | U | 0.1 | U | 0.1 | U | **0.566** | |
| 10/26/98 | 0.1 | U | 0.1 | U | 0.1 | U | 0.1 | U | **1.47** | |
| 04/13/99 | 0.1 | U | 0.1 | U | 0.1 | U | 0.1 | U | **1.59** | |
| 10/05/99 | 0.075 | U | 0.075 | U | 0.075 | U | 0.075 | U | **1.55** | |
| 05/25/00 | 0.075 | U | 0.075 | U, CSH | 0.075 | U | 0.075 | U | 0.2 | U |
| 10/10/00 | 0.075 | U, SPH | 0.075 | U | 0.075 | U | 0.075 | U | 0.41 | J |
| 05/08/01 | 0.075 | U | 0.075 | U | 0.075 | U | 0.075 | U | 0.2 | U |
| 10/16/01 | 0.19 | U | 0.19 | U | 0.13 | U | 0.1 | U | **0.843** | J |
| 04/22/02 | 0.18 | U | 0.195 | U | 0.16 | U | 0.21 | U | **0.937** | J |
| 10/22/02 | 0.18 | U | 0.195 | U | 0.16 | U | 0.21 | U | **0.729** | J, Dup |
| 04/09/03 | 0.18 | U | 0.195 | U | 0.16 | U | 0.21 | U | **0.804** | J, CSH |
| 10/07/03 | 0.18 | U | 0.195 | U | 0.16 | U | 0.21 | U | **0.841** | J |
| 04/12/04 | 0.25 | U | 0.25 | U | 0.225 | U | 0.21 | U | **0.69** | J |
| 10/18/04 | 0.25 | U | 0.25 | U | 0.225 | U | 0.21 | U | **0.863** | J |
| 10/10/05 | 0.25 | U | 0.25 | U | 0.225 | U | 0.21 | U | **0.712** | J |
| 04/17/06 | 0.25 | U | 0.25 | U | 0.225 | U | 0.21 | U | **0.998** | J |
| 10/17/06 | 0.075 | U | 0.075 | U | 0.05 | U | 0.10 | U | **0.95** | |

ANALYTICAL RESULTS FROM PLUME 3/4 MONITORING WELLS

| Date | MW-64C | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1, 1 - DCA | | 1, 1 - DCE | | PCE | | 1, 1, 1 - TCA | | TCE | |
| MCL/ES/PAL Limitations | None/850/85 | | 7/7/0.7 | | 5/5/0.5 | | 200/200/40 | | 5/5/0.5 | |
| 12/19/91 | 0.1 | U | 0.15 | U | 0.15 | U | 0.45 | U | **0.8** | |
| 7/92 | 0.1 | U | 0.15 | U | 0.15 | U | 0.45 | U | **0.8** | |
| 02/08/94 | 0.18 | ND | 0.18 | ND | 0.04 | | 0.2 | | 0.18 | ND |
| 03/28/94 | 0.18 | ND | 0.18 | ND | 0.18 | ND | 0.18 | ND | 0.18 | ND |
| 06/06/94 | 0.18 | ND | 0.18 | ND | 0.18 | ND | 0.18 | ND | 0.18 | ND |
| 08/23/94 | 0.18 | ND | 0.18 | ND | 0.18 | ND | 0.18 | ND | **1.2** | |
| 10/27/94 | 0.18 | ND | 0.18 | ND | 0.18 | ND | 0.18 | ND | **2.1** | |
| 01/19/95 | 0.18 | ND | 0.18 | ND | 0.18 | ND | 0.18 | ND | **1.8** | |
| 04/19/95 | 0.18 | ND | 0.18 | ND | 0.18 | ND | 0.18 | ND | **3.2** | |
| 07/18/95 | 0.18 | ND | 0.18 | ND | 0.18 | ND | 0.18 | ND | **2.7** | |
| 09/12/95 | 0.18 | ND | 0.18 | ND | 0.18 | ND | 0.18 | ND | 0.18 | ND |
| 01/08/96 | 0.18 | ND | 0.18 | ND | 0.18 | ND | 0.18 | ND | **3** | |
| 04/17/96 | 0.18 | ND | 0.18 | ND | 0.18 | ND | 0.18 | ND | **2.6** | |
| 07/08/96 | 0.18 | ND | 0.18 | ND | 0.18 | ND | 0.18 | ND | 0.18 | ND |
| 10/01/96 | 0.18 | ND | 0.18 | ND | 0.18 | ND | 0.18 | ND | **2.3** | |
| 05/19/97 | 0.18 | ND | 0.18 | ND | 0.18 | ND | 0.18 | ND | 0.33 | |
| 10/22/97 | 0.2 | U | 0.25 | U | 0.3 | U | 0.35 | U | **1.84** | |
| 04/21/98 | 0.1 | U | 0.1 | U | 0.1 | U | 0.1 | U | 0.18 | U |
| 0/26/98 | 0.1 | U | 0.1 | U | 0.1 | U | 0.1 | U | **1.39** | |
| 04/13/99 | 0.1 | U | 0.1 | U | 0.1 | U | 0.1 | U | **1.18** | J |
| 10/05/99 | 0.075 | U | 0.075 | U | 0.075 | U | 0.075 | U | **1.35** | |
| 05/25/00 | 0.075 | U | 0.075 | U | 0.075 | U | 0.075 | U | 0.2 | U |
| 10/10/00 | 0.075 | U, SPH | 0.075 | U | 0.075 | U | 0.075 | U | **0.716** | J |
| 05/08/01 | 0.075 | U | 0.075 | U | 0.075 | U | 0.075 | U | **0.642** | J |
| 10/16/01 | 0.19 | U | 0.19 | U | 0.13 | U | 0.1 | U | 0.13 | U |
| 04/22/02 | 0.18 | U | 0.195 | U | 0.16 | U | 0.21 | U | **0.642** | J |
| 10/22/02 | 0.18 | U | 0.195 | U | 0.16 | U | 0.21 | U | **0.642** | J, Dup |
| 04/08/03 | 0.18 | U | 0.195 | U | 0.16 | U | 0.21 | U | **0.746** | J |
| 10/07/03 | 0.18 | U | 0.195 | U | 0.16 | U | 0.21 | U | **0.708** | J |
| 04/12/04 | 0.25 | U | 0.25 | U | 0.225 | U | 0.21 | U | **0.579** | J |
| 10/18/04 | 0.25 | U | 0.25 | U | 0.225 | U | 0.21 | U | **0.816** | J |
| 04/13/05 | 0.25 | U | 0.25 | U | 0.225 | U | 0.21 | U | 0.25 | U |
| 10/10/05 | 0.25 | U | 0.25 | U | 0.225 | U | 0.21 | U | 0.25 | U |
| 04/17/06 | 0.25 | U | 0.25 | U | 0.225 | U | 0.21 | U | 0.25 | U |
| 10/17/06 | 0.075 | U | 0.075 | U | 0.05 | U | 0.10 | U | **0.75** | |

ANALYTICAL RESULTS FROM PLUME 3/4 MONITORING WELLS

| Date | MW-65B | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1, 1 - DCA | | 1, 1 - DCE | | PCE | | 1, 1, 1 - TCA | | TCE | |
| MCL/ES/PAL Limitations | None/850/85 | | 7/7/0.7 | | 5/5/0.5 | | 200/200/40 | | 5/5/0.5 | |
| 12/19/91 | 0.1 | U | 0.15 | U | 0.15 | U | 0.45 | U | **0.8** | |
| 7/92 | 0.1 | U | 0.15 | U | 0.15 | U | 0.45 | U | **0.8** | |
| 02/08/94 | 0.18 | ND | 0.18 | ND | 0.18 | ND | 0.2 | ND | 0.4 | ND |
| 03/28/94 | 0.18 | ND | 0.18 | ND | 0.18 | ND | 0.18 | ND | 0.18 | ND |
| 06/06/94 | 0.18 | ND | 0.18 | ND | 0.18 | ND | 0.18 | ND | 0.18 | ND |
| 08/23/94 | 0.18 | ND | 0.18 | ND | 0.18 | ND | 1 | | **1.3** | |
| 10/27/94 | 0.18 | ND | 0.18 | ND | 0.18 | ND | 1.6 | | 0.18 | ND |
| 01/19/95 | 0.18 | ND | 0.18 | ND | 0.18 | ND | 0.18 | ND | **1.2** | |
| 04/19/95 | 0.18 | ND | 0.18 | ND | 0.18 | ND | 0.18 | ND | **1.9** | |
| 07/18/95 | 0.18 | ND | 0.18 | ND | 0.18 | ND | 0.18 | ND | **1.4** | |
| 09/12/95 | 0.18 | ND | 0.18 | ND | 0.18 | ND | 0.18 | ND | 0.18 | ND |
| 01/08/96 | 0.18 | ND | 0.18 | ND | 0.18 | ND | 0.18 | ND | **2.1** | |
| 04/17/96 | 0.18 | ND | 0.18 | ND | 0.18 | ND | 0.49 | | 0.36 | |
| 07/08/96 | 0.18 | ND | 0.18 | ND | 0.18 | ND | 0.18 | ND | 0.18 | ND |
| 10/01/96 | 0.18 | ND | 0.18 | ND | 0.18 | ND | 0.18 | ND | 0.18 | ND |
| 05/19/97 | 0.18 | ND | 0.18 | ND | 0.18 | ND | 0.18 | ND | 0.13 | |
| 04/21/98 | 0.1 | U | 0.1 | U | 0.1 | U | 0.1 | U | **0.934** | |
| 07/27/99 | 0.05 | U | 0.075 | U | 0.075 | U | 0.1 | U | **0.669** | **J** |
| 07/18/00 | 0.075 | U | 0.075 | U | 0.075 | U | 0.075 | U | 0.2 | U |
| 07/16/01 | 0.19 | U | 0.19 | U | 0.13 | U | 0.1 | U | 0.13 | U, CSH |
| 07/09/02 | 0.18 | U | 0.195 | U | 0.16 | U | 0.21 | U | **0.906** | **J** |
| 04/08/03 | 0.18 | U | 0.195 | U | 0.16 | U | 0.21 | U | 0.465 | J |
| 10/07/03 | 0.18 | U | 0.195 | U | 0.16 | U | 0.21 | U | 0.404 | J |
| 04/12/04 | 0.25 | U | 0.25 | U | 0.225 | U | 0.21 | U | 0.25 | U |
| 10/18/04 | 0.25 | U | 0.25 | U | 0.225 | U | 0.21 | U | 0.25 | U |
| 07/11/05 | 0.25 | U | 0.25 | U | 0.225 | U | 0.21 | U | 0.25 | U |
| 07/25/06 | 0.25 | U | 0.25 | U | 0.355 | U | 0.21 | U | **0.51** | J |

ANALYTICAL RESULTS FROM PLUME 3/4 MONITORING WELLS

| Date | MW-65C | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1, 1 - DCA | | 1, 1 - DCE | | PCE | | 1, 1, 1 - TCA | | TCE | |
| MCL/ES/PAL Limitations | None/850/85 | | 7/7/0.7 | | 5/5/0.5 | | 200/200/40 | | 5/5/0.5 | |
| 12/19/91 | 0.1 | U | 0.15 | U | 0.15 | U | 0.45 | U | **2** | |
| 7/92 | 0.1 | U | 0.15 | U | 0.15 | U | 0.45 | U | **2** | |
| 02/08/94 | 0.4 | | 0.18 | ND | 0.18 | ND | 0.7 | | **2** | |
| 03/28/94 | 0.18 | ND | 0.18 | ND | 0.18 | ND | 0.18 | ND | **1.6** | |
| 06/06/94 | 0.18 | ND | 0.18 | ND | 0.18 | ND | 0.18 | ND | **2** | |
| 08/23/94 | 0.18 | ND | 0.18 | ND | 0.18 | ND | 1.2 | | 0.18 | ND |
| 10/27/94 | 0.18 | ND | 0.18 | ND | 0.18 | ND | 2.1 | | 0.18 | ND |
| 01/19/95 | 0.18 | ND | 0.18 | ND | 0.18 | ND | 0.18 | ND | **3.4** | |
| 04/19/95 | 0.18 | ND | 0.18 | ND | 0.18 | ND | 0.18 | ND | **4.3** | |
| 07/18/95 | 0.18 | ND | 0.18 | ND | 0.18 | ND | 0.18 | ND | **4** | |
| 09/12/95 | 0.18 | ND | 0.18 | ND | 0.18 | ND | 0.18 | ND | **2.4** | |
| 01/08/96 | 0.18 | ND | 0.18 | ND | 0.18 | ND | 0.18 | ND | **3.9** | |
| 04/17/96 | 0.18 | ND | 0.18 | ND | 0.18 | ND | 0.49 | | **1.1** | |
| 07/08/96 | 0.18 | ND | 0.18 | ND | 0.18 | ND | 0.18 | ND | 0.18 | ND |
| 10/01/96 | 0.18 | ND | 0.18 | ND | 0.18 | ND | 0.18 | ND | **3.1** | |
| 05/19/97 | 0.18 | ND | 0.18 | ND | 0.18 | ND | 0.18 | ND | **1.69** | |
| 04/21/98 | 0.1 | U | 0.1 | U | 0.1 | U | 0.1 | U | **0.546** | |
| 07/27/99 | 0.05 | U | 0.075 | U | 0.075 | U | 0.1 | U | **1.57** | |
| 07/18/00 | 0.075 | U | 0.075 | U | 0.075 | U | 0.075 | U | **0.597** | J |
| 07/16/01 | 0.19 | U | 0.19 | U | 0.13 | U | 0.1 | U | **1.2** | CSH |
| 07/09/02 | 0.18 | U | 0.195 | U | 0.16 | U | 0.42 | U | **0.736** | J |
| 04/08/03 | 0.18 | U | 0.195 | U | 0.16 | U | 0.42 | U | **0.931** | J |
| 10/07/03 | 0.18 | U | 0.195 | U | 0.16 | U | 0.21 | U | **0.865** | J |
| 04/12/04 | 0.25 | U | 0.25 | U | 0.225 | U | 0.21 | U | **0.674** | J |
| 10/18/04 | 0.25 | U | 0.25 | U | 0.225 | U | 0.21 | U | **0.962** | J |
| 04/13/05 | 0.25 | U | 0.25 | U | 0.225 | U | 0.21 | U | **0.653** | J |
| 10/10/05 | 0.25 | U | 0.25 | U | 0.225 | U | 0.21 | U | **0.72** | J |
| 04/17/06 | 0.25 | U | 0.25 | U | 0.225 | U | 0.21 | U | **1.14** | J |
| 10/17/06 | 0.075 | U | 0.075 | U | 0.05 | U | 0.10 | U | **1.03** | |

ANALYTICAL RESULTS FROM PLUME 3/4 MONITORING WELLS

| Date | MW-66A | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1, 1 - DCA | | 1, 1 - DCE | | PCE | | 1, 1, 1 - TCA | | TCE | |
| MCL/ES/PAL Limitations | None/850/85 | | 7/7/0.7 | | 5/5/0.5 | | 200/200/40 | | 5/5/0.5 | |
| 7/92 | 9 | | 0.35 | U | 0.3 | U | **55** | | 0.25 | U |
| 02/08/94 | 9 | | 0.6 | | 0.2 | | **60** | | 0.4 | |
| 03/28/94 | 5.2 | | 0.18 | ND | 0.18 | ND | 37 | | 0.18 | ND |
| 06/06/94 | 8.9 | | 0.18 | ND | 0.18 | ND | **49** | | 0.18 | ND |
| 08/23/94 | 8.3 | | 0.18 | ND | 0.18 | ND | **46** | | 0.18 | ND |
| 10/27/94 | 6.6 | | 0.18 | ND | 0.18 | ND | **42** | | 0.18 | ND |
| 01/19/95 | 5.8 | | 0.18 | ND | 0.18 | ND | 37 | | 0.18 | ND |
| 04/19/95 | 5.2 | | 0.18 | ND | 0.18 | ND | 38 | | 0.18 | ND |
| 07/18/95 | 3.3 | | 0.18 | ND | 0.18 | ND | 32 | | 0.18 | ND |
| 09/12/95 | 3.3 | | 0.18 | ND | 0.18 | ND | 28 | | 0.18 | ND |
| 01/08/96 | 3.3 | | 0.18 | ND | 0.18 | ND | 27 | | 0.18 | ND |
| 04/17/96 | 0.25 | | 0.18 | ND | 0.24 | | 23 | | **0.64** | |
| 07/08/96 | 2.6 | | 0.18 | ND | 0.18 | ND | 23 | | 0.18 | ND |
| 10/01/96 | 2.2 | | 0.18 | ND | 0.18 | | 24 | | **0.53** | |
| 03/17/97 | 2.1 | | 0.18 | ND | 0.18 | ND | 26.6 | | 0.374 | |
| 05/19/97 | 0.18 | ND | **1.79** | | 0.18 | ND | 22.8 | | 0.18 | |
| 07/21/97 | 1.88 | | 0.18 | | 0.18 | ND | 25 | | 0.16 | |
| 10/21/97 | 1.75 | | 0.25 | U | 0.3 | U | 18.6 | | 0.485 | |
| 01/27/98 | 1.61 | | 0.1 | U | 0.1 | U | 18.5 | | 0.458 | |
| 04/20/98 | 1.39 | | 0.1 | U | 0.1 | U | 18.9 | | **0.529** | |
| 07/21/98 | 1.3 | | 0.1 | U | 0.1 | U | 13.1 | | 0.461 | |
| 10/26/98 | 1.28 | | 0.1 | U | 0.1 | U | 12.7 | | 0.378 | |
| 01/19/99 | 1.17 | | 0.1 | U | 0.206 | J | 12.2 | | 0.462 | J |
| 04/13/99 | 1.17 | | 0.1 | U | 0.1 | U | 12.2 | | 0.407 | J |
| 07/27/99 | 1.07 | | 0.167 | J | 0.075 | U | 10.2 | | 0.2 | U |
| 10/05/99 | 1.09 | | 0.175 | J | 0.075 | U | 10.8 | | 0.429 | |
| 02/01/00 | 0.348 | J | 0.075 | U | 0.075 | U, CSL | 4.21 | | 0.2 | U |
| 05/25/00 | 0.075 | U | 0.075 | U, CSH | 0.075 | U | 1.45 | | 0.2 | U |
| 07/17/00 | 0.075 | U | 0.075 | U | 0.075 | U | 1.08 | | 0.2 | U |
| 10/10/00 | 0.075 | U, SPH | 0.075 | U | 0.075 | U | 1.64 | | 0.2 | U |
| 01/23/01 | 0.075 | U | 0.075 | U | 0.075 | U | 0.293 | J, SPH | 0.2 | U, SPH |
| 05/08/01 | 0.075 | U | 0.075 | U | 0.075 | U | 0.387 | J | 0.2 | U |
| 07/16/01 | 0.19 | U | 0.19 | U | 0.13 | U | 0.366 | J | 0.13 | U, CSH |
| 10/16/01 | 0.19 | U | 0.19 | U | 0.13 | U | 0.1 | U | 0.13 | U |
| 01/08/02 | 0.19 | U | 0.19 | U | 0.13 | U | 0.1 | U | 0.13 | U |
| 04/22/02 | 0.18 | U | 0.195 | U | 0.16 | U | 0.21 | U | 0.18 | U |
| 07/09/02 | 0.18 | U | 0.195 | U | 0.16 | U | 0.21 | U | 0.18 | U |
| 10/21/02 | 0.18 | U | 0.195 | U | 0.16 | U | 0.21 | U | 0.18 | U |
| 01/06/03 | 0.18 | U | 0.195 | U | 0.16 | U | 0.21 | U | 0.18 | U |
| 04/13/05 | 0.25 | U | 0.25 | U | 0.225 | U | 0.21 | U | 0.25 | U |

ANALYTICAL RESULTS FROM PLUME 3/4 MONITORING WELLS

| Date | MW-66B | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1, 1 - DCA | | 1, 1 - DCE | | PCE | | 1, 1, 1 - TCA | | TCE | |
| MCL/ES/PAL Limitations | None/850/85 | | 7/7/0.7 | | 5/5/0.5 | | 200/200/40 | | 5/5/0.5 | |
| 7/92 | **110** | | **4** | | **4** | | **160** | | 0.1 | U |
| 02/08/94 | 76 | | **3** | | **2** | | **140** | | 0.4 | |
| 03/28/94 | 19 | | 0.5 | U | 0.5 | U | **42** | | 0.5 | U |
| 06/06/94 | 27 | | 1.2 | | **1.4** | | **46** | | 0.5 | U |
| 08/23/94 | 64 | | 2.5 | U | 2.5 | U | **150** | | 2.5 | U |
| 10/27/94 | 21 | | 0.5 | U | 0.5 | U | **49** | | 0.5 | U |
| 01/19/95 | 29 | | **2** | | **2.9** | | **83** | | 0.5 | U |
| 04/19/95 | 15 | | 0.5 | U | 0.5 | U | **41** | | 0.5 | U |
| 07/18/95 | 6.2 | | 0.5 | U | 0.5 | U | 14 | | 0.5 | U |
| 09/12/95 | 0.5 | U | 0.5 | U | 0.5 | U | 2.7 | | 0.5 | U |
| 01/08/96 | 0.5 | U | 0.5 | U | 0.5 | U | 2.5 | | 0.5 | U |
| 04/17/96 | 0.46 | | 0.245 | U | 0.19 | | 1.7 | | 0.105 | U |
| 07/08/96 | 0.59 | | 0.205 | U | **0.64** | | 2.5 | | 0.24 | |
| 10/01/96 | 0.42 | | 0.205 | U | **0.58** | | 2 | | 0.27 | |
| 05/19/97 | 0.04 | U | 0.15 | | 0.11 | U | 0.9 | | 0.06 | U |
| 10/21/97 | 0.2 | U | 0.25 | U | 0.3 | U | 0.894 | | 0.2 | U |
| 04/20/98 | 0.1 | U | 0.1 | U | 0.1 | U | 0.1 | U | 0.18 | U |
| 10/26/98 | 0.1 | U | 0.1 | U | 0.1 | U | 0.681 | | 0.18 | U |
| 04/13/99 | 0.2 | | 0.2 | | 0.272 | J | 0.81 | | 0.474 | J |
| 10/05/99 | 0.307 | J | 0.075 | U | 0.256 | J | 0.837 | | **0.774** | |
| 05/25/00 | 0.075 | U | 0.075 | U | 0.075 | U | 0.075 | U | 0.2 | U |
| 10/10/00 | 0.075 | U | 0.075 | U | 0.245 | J | 0.319 | J | 0.2 | U |
| 05/08/01 | 0.075 | U | 0.075 | U | 0.075 | U | 0.075 | U | 0.2 | U |
| 10/16/01 | 0.19 | U | 0.19 | U | 0.13 | U | 0.1 | U | 0.13 | U |
| 04/22/02 | 0.18 | U | 0.195 | U | 0.16 | U | 0.21 | U | 0.362 | J |
| 10/21/02 | 0.18 | U | 0.195 | U | 0.16 | U | 0.21 | U | 0.18 | U |
| 07/22/03 | 0.18 | U | 0.195 | U, CSL | 0.16 | U | 0.21 | U | 0.18 | U |
| 07/14/04 | 0.25 | U | 0.25 | U | 0.225 | U | 0.21 | U | 0.25 | U |
| 04/13/05 | 0.25 | U | 0.25 | U | 0.225 | U | 0.21 | U | 0.25 | U |
| 07/11/05 | 0.25 | U | 0.25 | U | 0.225 | U | 0.21 | U | 0.25 | U |
| 07/25/06 | 0.25 | U | 0.25 | U | 0.355 | U | 0.44 | J | **0.58** | J |

ANALYTICAL RESULTS FROM PLUME 3/4 MONITORING WELLS

| Date | MW-66C | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1, 1 - DCA | | 1, 1 - DCE | | PCE | | 1, 1, 1 - TCA | | TCE | |
| MCL/ES/PAL Limitations | None/850/85 | | 7/7/0.7 | | 5/5/0.5 | | 200/200/40 | | 5/5/0.5 | |
| 7/92 | 2 | | 0.15 | U | 0.15 | U | 4 | | 0.1 | U |
| 02/08/94 | 0.1 | ND | 0.1 | ND | 0.1 | ND | 1 | | 0.1 | |
| 03/28/94 | 0.1 | ND | 0.1 | ND | 0.1 | ND | 2.2 | | 0.18 | ND |
| 06/06/94 | 0.1 | ND | 0.1 | ND | 0.1 | ND | 2 | | 0.18 | ND |
| 08/23/94 | 0.1 | ND | 0.1 | ND | 0.1 | ND | 2.3 | | 0.18 | ND |
| 10/27/94 | 0.1 | ND | 0.1 | ND | 0.1 | ND | 0.1 | ND | 0.18 | ND |
| 01/19/95 | 0.1 | ND | 0.1 | ND | 0.1 | ND | 0.1 | ND | 0.18 | ND |
| 04/19/95 | 0.1 | ND | 0.1 | ND | 0.1 | ND | 0.1 | ND | 0.18 | ND |
| 07/18/95 | 0.1 | ND | 0.1 | ND | 0.1 | ND | 0.1 | ND | 0.18 | ND |
| 09/12/95 | 0.1 | ND | 0.1 | ND | 0.1 | ND | 0.1 | ND | 0.18 | ND |
| 01/08/96 | 0.1 | ND | 0.1 | ND | 0.1 | ND | 0.1 | ND | 0.18 | ND |
| 04/17/96 | 0.1 | ND | 0.1 | ND | 0.1 | ND | 0.75 | | 0.18 | ND |
| 07/08/96 | 0.1 | ND | 0.1 | ND | 0.1 | ND | 0.52 | | 0.18 | ND |
| 10/01/96 | 0.1 | ND | 0.1 | ND | 0.1 | ND | 0.68 | | 0.18 | ND |
| 05/19/97 | 0.1 | ND | 0.1 | ND | 0.1 | ND | 0.12 | | 0.18 | U |
| 10/21/97 | 0.2 | U | 0.25 | U | 0.3 | U | 0.35 | U | 0.2 | U |
| 04/20/98 | 0.1 | U | 0.1 | U | 0.21 | | 0.737 | | 0.377 | |
| 10/26/98 | 0.1 | U | 0.1 | U | 0.1 | U | 0.1 | U | 0.18 | U |
| 04/13/99 | 0.1 | U | 0.1 | U | 0.1 | U | 0.1 | U | 0.18 | U |
| 07/23/03 | 0.18 | U | 0.195 | U, CSL | 0.16 | U | 0.21 | U | 0.18 | U |
| 07/14/04 | 0.25 | U | 0.25 | U | 0.225 | U | 0.21 | U | 0.25 | U |
| 04/12/05 | 0.25 | U | 0.25 | U | 0.225 | U | 0.21 | U | 0.25 | U |

TABLE 10

ANALYTICAL RESULTS FROM PLUME 5 MONITORING WELLS

| Date | MW-17C | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1, 1 - DCA | | 1, 1 - DCE | | PCE | | 1, 1, 1 - TCA | | TCE | |
| MCL/ES/PAL Limitations | None/850/85 | | 7/7/0.7 | | 5/5/0.5 | | 200/200/40 | | 5/5/0.5 | |
| 10/10/88 | 0.12 | U | 0.145 | U | 0.17 | U | 0.44 | U | 1.8 | |
| 04/26/91 | 0.1 | U | 0.15 | U | 0.15 | U | 0.45 | U | 0.1 | U |
| 07/21/95 | 0.2 | U | 0.3 | U | 0.2 | U | 0.15 | U | 0.1 | U |
| 09/17/98 | 0.1 | U | 0.1 | U | 0.1 | U | 0.226 | J | 0.18 | U |
| 04/13/99 | 0.1 | U | 0.1 | U | 0.1 | U | 0.1 | U | 0.18 | U |
| 10/05/99 | 0.075 | U | 0.075 | U | 0.075 | U | 0.075 | U | 0.05 | U |
| 06/06/00 | 0.075 | U | 0.075 | U, CSH | 0.075 | U | 0.075 | U | 0.2 | U |
| 10/11/00 | 0.075 | U, SPH | 0.075 | U | 0.075 | U | 0.075 | U | 0.2 | U |
| 05/07/01 | 0.075 | U | 0.075 | U | 0.075 | U | 0.075 | U | 0.2 | U |
| 10/15/01 | 0.19 | U | 0.19 | U | 0.13 | U | 0.1 | U | 0.13 | U |
| 04/22/02 | 0.18 | U | 0.195 | U | 0.16 | U | 0.21 | U | 0.18 | U |
| 10/21/02 | 0.18 | U | 0.195 | U | 0.16 | U | 0.21 | U | 0.18 | U |
| 07/21/03 | 0.18 | U | 0.195 | U | 0.16 | U | 0.21 | U | 0.18 | U |
| 07/14/04 | 0.25 | U | 0.25 | U | 0.225 | U | 0.21 | U | 0.25 | U |
| 07/11/05 | 0.25 | U | 0.25 | U | 0.225 | U | 0.21 | U | 0.25 | U |
| 07/25/06 | 0.25 | U | 0.25 | U | 0.355 | U | 0.21 | U | 0.25 | U |

ANALYTICAL RESULTS FROM PLUME 5 MONITORING WELLS

| Date | MW-17C | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1, 1 - DCA | | 1, 1 - DCE | | PCE | | 1, 1, 1 - TCA | | TCE | |
| MCL/ES/PAL Limitations | None/850/85 | | 7/7/0.7 | | 5/5/0.5 | | 200/200/40 | | 5/5/0.5 | |
| 10/10/88 | 0.12 | U | 0.145 | U | 0.17 | U | 0.44 | U | 1.8 | |
| 04/26/91 | 0.1 | U | 0.15 | U | 0.15 | U | 0.45 | U | 0.1 | U |
| 07/21/95 | 0.2 | U | 0.3 | U | 0.2 | U | 0.15 | U | 0.1 | U |
| 09/17/98 | 0.1 | U | 0.1 | U | 0.1 | U | 0.226 | J | 0.18 | U |
| 04/13/99 | 0.1 | U | 0.1 | U | 0.1 | U | 0.1 | U | 0.18 | U |
| 10/05/99 | 0.075 | U | 0.075 | U | 0.075 | U | 0.075 | U | 0.05 | U |
| 06/06/00 | 0.075 | U | 0.075 | U, CSH | 0.075 | U | 0.075 | U | 0.2 | U |
| 10/11/00 | 0.075 | U, SPH | 0.075 | U | 0.075 | U | 0.075 | U | 0.2 | U |
| 05/07/01 | 0.075 | U | 0.075 | U | 0.075 | U | 0.075 | U | 0.2 | U |
| 10/15/01 | 0.19 | U | 0.19 | U | 0.13 | U | 0.1 | U | 0.13 | U |
| 04/22/02 | 0.18 | U | 0.195 | U | 0.16 | U | 0.21 | U | 0.18 | U |
| 10/21/02 | 0.18 | U | 0.195 | U | 0.16 | U | 0.21 | U | 0.18 | U |
| 07/21/03 | 0.18 | U | 0.195 | U | 0.16 | U | 0.21 | U | 0.18 | U |
| 07/14/04 | 0.25 | U | 0.25 | U | 0.225 | U | 0.21 | U | 0.25 | U |
| 07/11/05 | 0.25 | U | 0.25 | U | 0.225 | U | 0.21 | U | 0.25 | U |
| 07/25/06 | 0.25 | U | 0.25 | U | 0.355 | U | 0.21 | U | 0.25 | U |

ANALYTICAL RESULTS FROM PLUME 5 MONITORING WELLS

| Date | MW-19 | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1, 1 - DCA | | 1, 1 - DCE | | PCE | | 1, 1, 1 - TCA | | TCE | |
| MCL/ES/PAL Limitations | None/850/85 | | 7/7/0.7 | | 5/5/0.5 | | 200/200/40 | | 5/5/0.5 | |
| 10/88 | 0.21 | J | 0.145 | U | 0.25 | J | 0.69 | J | **4.3** | |
| 4/91 | 0.1 | U | 0.15 | U | 0.15 | U | 0.45 | U | **4** | B, J |
| 07/21/95 | 0.2 | U | 0.3 | U | 0.2 | U | 0.15 | U | 1 | |
| 04/16/99 | 0.1 | U | 0.1 | U | 0.1 | U | 0.1 | U | **0.794** | J, CSH |
| 10/05/99 | 0.075 | U | 0.075 | U | 0.075 | U | 0.075 | U | **0.901** | |
| 10/10/00 | 0.075 | U, SPH | 0.075 | U | 0.075 | U | 0.075 | U | 0.2 | U |
| 05/07/01 | 0.075 | U | 0.075 | U | 0.075 | U | 0.075 | U | 0.431 | J |
| 10/16/01 | 0.19 | U | 0.19 | U | 0.13 | U | 0.1 | U | 0.499 | J |
| 04/22/02 | 0.18 | U | 0.195 | U | 0.16 | U | 0.21 | U | 0.18 | U |
| 10/21/02 | 0.18 | U | 0.195 | U | 0.16 | U | 0.21 | U | 0.18 | U |
| 07/21/03 | 0.18 | U | 0.195 | U | 0.16 | U | 0.21 | U | 0.18 | U |
| 07/14/04 | 0.25 | U | 0.25 | U | 0.225 | U | 0.21 | U | 0.25 | U |

ANALYTICAL RESULTS FROM PLUME 5 MONITORING WELLS

| Date | MW-72 | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1, 1 - DCA | | 1, 1 - DCE | | PCE | | 1, 1, 1 - TCA | | TCE | |
| MCL/ES/PAL Limitations | None/850/85 | | 7/7/0.7 | | 5/5/0.5 | | 200/200/40 | | 5/5/0.5 | |
| 09/17/98 | 0.203 | | 0.1 | U | 0.1 | U | 0.565 | | **5.3** | |
| 10/28/98 | 0.1 | U | 0.1 | U | 0.216 | J | 0.538 | J | **3.55** | |
| 01/19/99 | 0.1 | U | 0.1 | U | 0.237 | J | 0.565 | J | **3.85** | |
| 04/13/99 | 0.1 | U | 0.1 | U | 0.285 | J | 0.479 | J | **3.12** | CSH |
| 07/26/99 | 0.166 | J | 0.075 | U | 0.223 | J | 0.45 | J | **3.04** | |
| 10/05/99 | 0.183 | J | 0.075 | U | 0.183 | J | 0.531 | | **3.34** | |
| 02/01/00 | 0.075 | U | 0.075 | U | 0.214 | J | 0.301 | J | **1.99** | |
| 05/22/00 | 0.075 | U | 0.075 | U, CSH | 0.075 | U | 0.17 | J | **1.2** | J |
| 07/17/00 | 0.075 | U | 0.075 | U | 0.075 | U | 0.075 | U | **1.03** | J |
| 10/10/00 | 0.075 | U, SPH | 0.075 | U | 0.075 | U | 0.075 | U | 0.2 | U |
| 01/23/01 | 0.075 | U | 0.075 | U | 0.075 | U | 0.075 | U, SPH | **1.06** | J, SPH |
| 05/07/01 | 0.075 | U | 0.075 | U | 0.075 | U | 0.075 | U | **1.08** | J |
| 07/16/01 | 0.19 | U | 0.19 | U | 0.13 | U | 0.1 | U | **1.4** | CSH |
| 10/15/01 | 0.19 | U | 0.19 | U | 0.13 | U | 0.1 | U | **1.92** | |
| 01/08/02 | 0.19 | U | 0.19 | U | 0.13 | U | 0.1 | U | **1.04** | |
| 04/22/02 | 0.18 | U | 0.195 | U | 0.16 | U | 0.21 | U | **1.4** | |
| 07/08/02 | 0.18 | U | 0.195 | U | 0.16 | U | 0.21 | U | **0.794** | J |
| 10/21/02 | 0.18 | U | 0.195 | U | 0.16 | U | 0.21 | U | 0.442 | J |
| 01/06/03 | 0.18 | U | 0.195 | U | 0.16 | U | 0.21 | U | 0.18 | U |
| 04/08/03 | 0.18 | U | 0.195 | U | 0.16 | U | 0.21 | U | 0.447 | J |
| 07/21/03 | 0.3 | U | 0.195 | U | 0.16 | U | 0.21 | U | 0.18 | U |
| 10/07/03 | 0.3 | U | 0.195 | U | 0.16 | U | 0.21 | U | 0.18 | U |
| 04/12/04 | 0.25 | U | 0.25 | U | 0.225 | U | 0.21 | U | 0.25 | U |
| 10/18/04 | 0.25 | U | 0.25 | U | 0.225 | U | 0.21 | U | **0.723** | J |
| 04/12/05 | 0.25 | U | 0.25 | U | 0.225 | U | 0.21 | U | 0.25 | U |
| 07/11/05 | 0.25 | U | 0.25 | U | 0.225 | U | 0.21 | U | 0.25 | U |
| 10/10/05 | 0.25 | U | 0.25 | U | 0.225 | U | 0.21 | U | 0.25 | U |
| 04/17/06 | 0.25 | U | 0.25 | U | 0.225 | U | 0.21 | U | 0.25 | U |
| 07/25/06 | 0.25 | U | 0.25 | U | 0.355 | U | 0.21 | U | 0.25 | U |
| 10/17/06 | 0.075 | U | 0.075 | U | 0.11 | J | 0.10 | U | 0.10 | U |

ANALYTICAL RESULTS FROM PLUME 5 MONITORING WELLS

| Date | MW-73 | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1, 1 - DCA | | 1, 1 - DCE | | PCE | | 1, 1, 1 - TCA | | TCE | |
| MCL/ES/PAL Limitations | None/850/85 | | 7/7/0.7 | | 5/5/0.5 | | 200/200/40 | | 5/5/0.5 | |
| 09/17/98 | 0.1 | U | 0.1 | U | 0.1 | U | 0.242 | J | **0.632** | |
| 10/28/98 | 0.1 | U | 0.1 | U | 0.1 | U | 0.307 | J | **0.763** | |
| 01/19/99 | 0.1 | U | 0.1 | U | 0.1 | U | 0.232 | J | 0.414 | J |
| 04/13/99 | 0.1 | U | 0.1 | U | 0.1 | U | 0.337 | J | **0.616** | J, CSH |
| 07/26/99 | 0.157 | J | 0.075 | U | 0.075 | U | 0.242 | J | **0.836** | J |
| 10/05/99 | 0.075 | U | 0.075 | U | 0.075 | U | 0.075 | U | **0.51** | |
| 02/01/00 | 0.262 | J | 0.075 | U | 0.16 | J | 0.377 | J | **1.48** | |
| 05/22/00 | 0.475 | J | 0.075 | U, CSH | 0.27 | J | 0.683 | | **3.74** | |
| 07/17/00 | 0.174 | J | 0.075 | U | 0.151 | J | 0.291 | J | **1.34** | |
| 10/10/00 | 0.27 | J, SPH | 0.075 | U | 0.205 | J | 0.41 | J | 0.2 | U |
| 01/23/01 | 0.075 | U | 0.075 | U | 0.075 | U | 0.075 | U, SPH | 0.2 | U, SPH |
| 05/07/01 | 0.075 | U | 0.075 | U | 0.161 | J | 0.075 | U | 0.455 | J |
| 07/16/01 | 0.19 | U | 0.19 | U | 0.13 | U | 0.1 | U | 0.305 | J, CSH |
| 10/15/01 | 0.19 | U | 0.19 | U | 0.13 | U | 0.1 | U | 0.13 | U |
| 01/08/02 | 0.19 | U | 0.19 | U | 0.13 | U | 0.1 | U | 0.13 | U |
| 04/22/02 | 0.18 | U | 0.195 | U | 0.16 | U | 0.21 | U | 0.18 | U |
| 07/08/02 | 0.18 | U | 0.195 | U | 0.16 | U | 0.21 | U | 0.18 | U |
| 10/21/02 | 0.18 | U | 0.195 | U | 0.16 | U | 0.21 | U | 0.18 | U |
| 01/06/03 | 0.18 | U | 0.195 | U | 0.16 | U | 0.21 | U | 0.18 | U |
| 04/08/03 | 0.18 | U | 0.195 | U | 0.16 | U | 0.21 | U | 0.18 | U |
| 07/21/03 | 0.18 | U | 0.195 | U | 0.16 | U | 0.21 | U | 0.18 | U |
| 07/14/04 | 0.25 | U | 0.25 | U | 0.225 | U | 0.21 | U | 0.25 | U |
| 07/11/05 | 0.25 | U | 0.25 | U | 0.225 | U | 0.21 | U | 0.25 | U |
| 07/25/06 | 0.25 | U | 0.25 | U | 0.355 | U | 0.21 | U | 0.25 | U |

TABLE 8

ANALYTICAL RESULTS FROM PLUME 3/4 MONITORING WELLS

NOTES:

All concentrations are in µg/L (ppb).

Concentration values shown in bold are above the NR 140 PAL.

Concentration values shown in bold and shaded are above the MCL/NR 140 ES.

B = Compound detected in blank.

D = Indicates initial analysis exceeded the calibration range, was diluted and re-analyzed.

E = Concentration exceeds calibration range of instrument.

J = Estimated concentration below laboratory quantitation level.

R = Unusable

U = Compound not detected at or above the detection limit, which is two times this value.

NA = Not analyzed

ND = Not detected at or above the detection limit.

NS = Not sampled.

Dup = Result of duplicate analysis in this quality assurance batch exceeds the limits for precision.

CSH = Check standard for this analyte exhibited a high bias. Sample results may also be biased high.

CSL = Check standard for this analyte exhibited a low bias. Sample results may also be biased low.

ISH = Internal standard recovery exceeds normal limits. Sample results ma;y be biased low.

MSH = Matrix spike recovery within analytical batch was high. Sample matrix appears similar to your sample; result may be biased high.

MSL = Matrix spike recovery within analytical batch was low. Sample matrix appears similar to your sample; result may be biased low.

SPH = Matrix spike recovery within analytical batch was high. Sample matrix appears similar to your sample; result may be biased high.

SPL = Matrix spike recovery within analytical batch was low. Sample matrix appears similar to your sample; result may be biased low.

Five Year Review
Site Inspection
Checklist

Please note that "O&M" is referred to throughout this checklist. At sites where Long-Term Response Actions are in progress, O&M activities may be referred to as "system operations" since these sites are not considered to be in the O&M phase while being remediated under the Superfund program.

# Five-Year Review Site Inspection Checklist (Template)

(Working document for site inspection. Information may be completed by hand and attached to the Five-Year Review report as supporting documentation of site status. "N/A" refers to "not applicable.")

## I. SITE INFORMATION

| | |
|---|---|
| **Site name:** National Presto Industries | **Date of inspection:** 1/23/07 |
| **Location and Region:** | **EPA ID:** WID 006196174 |
| **Agency, office, or company leading the five-year review:** Wisc DNR. | **Weather/temperature:** 20° F cloudy snow cover ~6" |

**Remedy Includes:** (Check all that apply)

- ✓ Landfill cover/containment
- ✓ Access controls
- ✓ Institutional controls
- ✓ Groundwater pump and treatment
- Surface water collection and treatment
- Monitored natural attenuation
- ✓ Groundwater containment
- Vertical barrier walls
- Other Vapor Extraction @MW-34/70 area
  Alternate Water Supply - Hallie

**Attachments:** Inspection team roster attached ✓ Site map attached

## II. INTERVIEWS (Check all that apply)

1. **O&M site manager** Derrick Paul (Name) Cash Manager (Title) 1/31/07 (Date)
   Interviewed at site ✓ at office ✓ by phone Phone no. _____
   Problems, suggestions; Report attached Yes

2. **O&M staff** Marcus Kobliska (Name) Maint. Supervisor (Title) 1/31/07 (Date)
   Interviewed at site ✓ at office ✓ by phone Phone no. _____
   Problems, suggestions; Report attached Yes

3. Clifford Wright, Proj Engineer. Gannett Fleming 1/25/2007
4. Dave Ellig, Proj. Mgr. Gannett Fleming 1/25/2007
5. Dennis Kugler, Proj Mgr. Gannett Fleming 1/25/2007

3. **Local regulatory authorities and response agencies** (i.e., State and Tribal offices, emergency response office, police department, office of public health or environmental health, zoning office, recorder of deeds, or other city and county offices, etc.) Fill in all that apply.

Agency Village of Lake Hallie 6/19/07
Contact Scott Schnobrich Water Supply Tech 715-723-5488
Name Title Date Phone no.
Problems; suggestions; Report attached Yes

Agency City of Eau Claire
Contact Jeff Pippinger Utilities Adm. 6/25/07 715-839-4920
Name Title Date Phone no.
Problems; suggestions; Report attached Yes

Agency
Contact
Name Title Date Phone no.
Problems; suggestions; Report attached

Agency
Contact
Name Title Date Phone no.
Problems; suggestions; Report attached

4. **Other interviews** (optional) Report attached.

**III. ON-SITE DOCUMENTS & RECORDS VERIFIED** (Check all that apply)

1. **O&M Documents**
   - O&M manual — Readily available Yes — Up to date — N/A
   - As-built drawings — Readily available Yes — Up to date — N/A
   - Maintenance logs — Readily available Yes — Up to date — N/A

   Remarks Logs @ NPI
   O&M manual & drawings at NPI office + Gannett Fleming office

2. **Site-Specific Health and Safety Plan** — Readily available Yes — Up to date Yes — N/A
   - Contingency plan/emergency response plan — Readily available — Up to date — N/A

   Remarks

3. **O&M and OSHA Training Records** — Readily available Yes — Up to date Yes — N/A

   Remarks

4. **Permits and Service Agreements**
   - Air discharge permit — Readily available ~~Yes~~ — Up to date ~~Yes~~ — (N/A)
   - Effluent discharge — Readily available Yes — Up to date Yes — N/A
   - Waste disposal, POTW — Readily available ~~N/A~~ — Up to date N/A — (N/A)
   - Other permits _____ — Readily available — Up to date — (N/A)

   Remarks Requirements + Approval for WW discharge at Gannett Fleming office

5. **Gas Generation Records** — Readily available Yes — Up to date Yes — N/A

   Remarks

6. **Settlement Monument Records** — Readily available — Up to date — (N/A)

   Remarks

7. **Groundwater Monitoring Records** — Readily available Yes — Up to date Yes — N/A

   Remarks

8. **Leachate Extraction Records** — Readily available — Up to date — (N/A)

   Remarks

9. **Discharge Compliance Records**
   - Air — Readily available Yes — Up to date Yes — N/A
   - Water (effluent) — Readily available Yes — Up to date Yes — N/A

   Remarks

10. **Daily Access/Security Logs** — Readily available Yes — Up to date Yes — N/A

    Remarks Reception area sign in

## IV. O&M COSTS

1. **O&M Organization**

~~State in-house~~ ~~Contractor for State~~
PRP in-house Yes Contractor for PRP Yes
~~Federal Facility in-house~~ ~~Contractor for Federal Facility~~
Other _____

2. **O&M Cost Records**

Readily available Yes Up to date Yes
Funding mechanism/agreement in place Yes
Original O&M cost estimate _____ Breakdown attached See body of report

Total annual cost by year for review period if available

From _____ To _____ _____ Breakdown attached
Date Date Total cost
From _____ To _____ _____ Breakdown attached
Date Date Total cost
From _____ To _____ _____ Breakdown attached
Date Date Total cost
From _____ To _____ _____ Breakdown attached
Date Date Total cost
From _____ To _____ _____ Breakdown attached
Date Date Total cost

3. **Unanticipated or Unusually High O&M Costs During Review Period**

Describe costs and reasons: None

## V. ACCESS AND INSTITUTIONAL CONTROLS (Applicable) N/A

### A. Fencing

1. **Fencing damaged** Location shown on site map NO Gates secured Yes N/A
Remarks Property partially fenced No trespassing signs, security personnel, MRDS - secure fenced

### B. Other Access Restrictions

1. **Signs and other security measures** Yes Location shown on site map NO N/A
Remarks _____

**C. Institutional Controls (ICs)**

1. **Implementation and enforcement**

Site conditions imply ICs not properly implemented — Yes (No) N/A
Site conditions imply ICs not being fully enforced — Yes (No) N/A

Type of monitoring (*e.g.*, self-reporting, drive by) Site inspection
Frequency annual by WDNR
Responsible party/agency NPL
Contact Derrick Paul (Name) Cash Menager (Title) ____ (Date) ____ (Phone no.)

Reporting is up-to-date — Yes No (N/A)
Reports are verified by the lead agency — Yes No (N/A)

Specific requirements in deed or decision documents have been met — Yes (No) N/A — OU3
Violations have been reported — Yes (No) N/A
Other problems or suggestions: Report attached

ICs are currently under review

2. **Adequacy** ICs are adequate ICs are inadequate N/A
Remarks ICs are currently under review

**D. General**

1. **Vandalism/trespassing** Location shown on site map (No vandalism evident)
Remarks

2. **Land use changes on site** (N/A)
Remarks NO

3. **Land use changes off site** (N/A)
Remarks NO

**VI. GENERAL SITE CONDITIONS**

**A. Roads** (Applicable) N/A

1. **Roads damaged** NO Location shown on site map (Roads adequate) N/A
Remarks

**B. Other Site Conditions**

Remarks_____

**VII. LANDFILL COVERS** (Applicable) N/A

**A. Landfill Surface**

1. **Settlement** (Low spots) Location shown on site map (Settlement not evident)
   Areal extent_____ Depth_____
   Remarks_____

2. **Cracks** Location shown on site map (Cracking not evident)
   Lengths_____ Widths_____ Depths_____
   Remarks_____

3. **Erosion** Location shown on site map (Erosion not evident)
   Areal extent_____ Depth_____
   Remarks_____

4. **Holes** Location shown on site map Holes not evident
   Areal extent 3" dia. Depth ~ 5"
   Remarks to be repaired

5. **Vegetative Cover** (Grass) (Cover properly established) (No signs of stress)
   Trees/Shrubs (indicate size and locations on a diagram)
   Remarks_____

6. **Alternative Cover (armored rock, concrete, etc.)** (N/A)
   Remarks_____

7. **Bulges** Location shown on site map (Bulges not evident)
   Areal extent_____ Height_____
   Remarks_____

8. **Wet Areas/Water Damage** (Wet areas/water damage not evident)
   - Wet areas — Location shown on site map — Areal extent_____
   - Ponding — Location shown on site map — Areal extent_____
   - Seeps — Location shown on site map — Areal extent_____
   - Soft subgrade — Location shown on site map — Areal extent_____

   Remarks_____

9. **Slope Instability** Slides — Location shown on site map — (No evidence of slope instability)
   Areal extent_____
   Remarks_____

**B. Benches** Applicable (N/A)

(Horizontally constructed mounds of earth placed across a steep landfill side slope to interrupt the slope in order to slow down the velocity of surface runoff and intercept and convey the runoff to a lined channel.)

1. **Flows Bypass Bench** — Location shown on site map — (N/A or okay)
   Remarks_____

2. **Bench Breached** — Location shown on site map — (N/A or okay)
   Remarks_____

3. **Bench Overtopped** — Location shown on site map — (N/A or okay)
   Remarks_____

**C. Letdown Channels** Applicable (N/A)

(Channel lined with erosion control mats, riprap, grout bags, or gabions that descend down the steep side slope of the cover and will allow the runoff water collected by the benches to move off of the landfill cover without creating erosion gullies.)

1. **Settlement** — Location shown on site map — No evidence of settlement
   Areal extent_____ Depth_____
   Remarks_____

2. **Material Degradation** — Location shown on site map — No evidence of degradation
   Material type_____ Areal extent_____
   Remarks_____

3. **Erosion** — Location shown on site map — No evidence of erosion
   Areal extent_____ Depth_____
   Remarks_____

4. **Undercutting** Location shown on site map No evidence of undercutting
Areal extent_____ Depth_____
Remarks_____

5. **Obstructions** Type_____ No obstructions
Location shown on site map Areal extent_____
Size_____
Remarks_____

6. **Excessive Vegetative Growth** Type_____
No evidence of excessive growth
Vegetation in channels does not obstruct flow
Location shown on site map Areal extent_____
Remarks_____

**D. Cover Penetrations** (Applicable) N/A

1. **Gas Vents** (Active) Passive
Properly secured/locked Yes Functioning Yes Routinely sampled Yes Good condition Yes
Evidence of leakage at penetration No Needs Maintenance No
N/A
Remarks_____

2. **Gas Monitoring Probes**
Properly secured/locked Yes Functioning Yes Routinely sampled No Good condition Yes
Evidence of leakage at penetration No Needs Maintenance No N/A
Remarks_____

3. **Monitoring Wells** (within surface area of landfill)
Properly secured/locked Functioning Routinely sampled Good condition
Evidence of leakage at penetration Needs Maintenance (N/A)
Remarks_____

4. **Leachate Extraction Wells**
Properly secured/locked Functioning Routinely sampled Good condition
Evidence of leakage at penetration Needs Maintenance (N/A)
Remarks_____

5. **Settlement Monuments** Located Routinely surveyed (N/A)
Remarks_____

**E. Gas Collection and Treatment** (Applicable) N/A

1. **Gas Treatment Facilities**
   ~~Flaring~~ Thermal destruction ~~Collection~~ for reuse
   Good condition Yes ~~Needs~~ Maintenance
   Remarks_____

2. ~~Gas Collection Wells~~, **Manifolds and Piping**
   (Good condition) Needs Maintenance
   Remarks_____

3. **Gas Monitoring Facilities** (*e.g.*, gas monitoring of adjacent homes or buildings)
   Good condition Yes Needs Maintenance No N/A
   Remarks_____

**F. Cover Drainage Layer** Applicable (N/A)

1. **Outlet Pipes Inspected** Functioning N/A
   Remarks_____

2. **Outlet Rock Inspected** Functioning N/A
   Remarks_____

**G. Detention/Sedimentation Ponds** (Applicable) N/A

1. **Siltation** Areal extent_____ Depth_____ N/A
   (Siltation not evident)
   Remarks_____

2. ~~Erosion~~ ~~Areal extent~~_____ ~~Depth~~_____
   (Erosion not evident)
   Remarks_____

3. **Outlet Works** Functioning (N/A)
   Remarks_____

4. **Dam** Functioning (N/A)
   Remarks_____

**H. Retaining Walls** Applicable (N/A)

1. **Deformations** Location shown on site map (Deformation not evident)
   Horizontal displacement_____ Vertical displacement_____
   Rotational displacement_____
   Remarks_____

2. **Degradation** Location shown on site map Degradation not evident
   Remarks_____

**I. Perimeter Ditches/Off-Site Discharge** (Applicable) N/A

1. **Siltation** Location shown on site map (Siltation not evident)
   Areal extent_____ Depth_____
   Remarks_____

2. **Vegetative Growth** Location shown on site map N/A
   (Vegetation does not impede flow)
   Areal extent_____ Type_____
   Remarks_____

3. **Erosion** Location shown on site map (Erosion not evident)
   Areal extent_____ Depth_____
   Remarks_____

4. **Discharge Structure** (Functioning) N/A
   Remarks_____

**VIII. VERTICAL BARRIER WALLS** Applicable (N/A)

1. **Settlement** Location shown on site map Settlement not evident
   Areal extent_____ Depth_____
   Remarks_____

2. **Performance Monitoring** Type of monitoring_____
   Performance not monitored
   Frequency_____ Evidence of breaching
   Head differential_____
   Remarks_____

**IX. GROUNDWATER/SURFACE WATER REMEDIES** Applicable N/A

**A. Groundwater Extraction Wells, Pumps, and Pipelines** Applicable N/A

1. **Pumps, Wellhead Plumbing, and Electrical**
   (Good condition) All required wells properly operating Needs Maintenance N/A
   Remarks EW3 - is no longer pumped. Replaced by EW-5

2. **Extraction System Pipelines, Valves, Valve Boxes, and Other Appurtenances**
   (Good condition) Needs Maintenance
   Remarks

3. **Spare Parts and Equipment**
   (Readily available) Good condition Requires upgrade Needs to be provided
   Remarks

**B. Surface Water Collection Structures, Pumps, and Pipelines** Applicable (N/A)

1. **Collection Structures, Pumps, and Electrical**
   Good condition Needs Maintenance
   Remarks

2. **Surface Water Collection System Pipelines, Valves, Valve Boxes, and Other Appurtenances**
   Good condition Needs Maintenance
   Remarks

3. **Spare Parts and Equipment**
   Readily available Good condition Requires upgrade Needs to be provided
   Remarks

**C. Treatment System** Applicable N/A

1. **Treatment Train** (Check components that apply)
   Metals removal Oil/water separation Bioremediation
   Air stripping Carbon adsorbers
   Filters
   Additive (*e.g.*, chelation agent, flocculent)
   Others
   Good condition Needs Maintenance
   Sampling ports properly marked and functional Yes
   Sampling/maintenance log displayed and up to date Yes
   Equipment properly identified Yes
   Quantity of groundwater treated annually 220 million gallons
   Quantity of surface water treated annually NA
   Remarks Cascade aerators - observed to be in good condition

2. **Electrical Enclosures and Panels** (properly rated and functional)
   N/A Good condition Needs Maintenance
   Remarks

3. **Tanks, Vaults, Storage Vessels**
   N/A Good condition Proper secondary containment Needs Maintenance
   Remarks Well vault for EW5 in good condition

4. **Discharge Structure and Appurtenances**
   N/A Good condition Needs Maintenance
   Remarks

5. **Treatment Building(s)**
   N/A Good condition (esp. roof and doorways) Needs repair
   Chemicals and equipment properly stored
   Remarks Yes

6. **Monitoring Wells** (pump and treatment remedy)
   Properly secured/locked ✓ Functioning ✓ Routinely sampled ✓ Good condition ✓
   All required wells located ✓ Needs Maintenance - several N/A
   Remarks wells require maint.

**D. Monitoring Data**

1. Monitoring Data ~~routinely collected~~ ~~collected~~
   Is routinely submitted on time Yes Is of acceptable quality Yes

2. Monitoring data suggests:
   Groundwater plume is effectively contained Yes Contaminant concentrations are declining in some wells

**D. Monitored Natural Attenuation**

1. **Monitoring Wells** (natural attenuation remedy)
   Properly secured/locked  Functioning  Routinely sampled  Good condition
   All required wells located  Needs Maintenance  (N/A)
   Remarks

## X. OTHER REMEDIES

If there are remedies applied at the site which are not covered above, attach an inspection sheet describing the physical nature and condition of any facility associated with the remedy. An example would be soil vapor extraction.

## XI. OVERALL OBSERVATIONS

**A. Implementation of the Remedy**

Describe issues and observations relating to whether the remedy is effective and functioning as designed. Begin with a brief statement of what the remedy is to accomplish (i.e., to contain contaminant plume, minimize infiltration and gas emission, etc.).

goal of the remedy is to prevent migration of contaminated groundwater from off the DPI property, to prevent discharge of contaminants from the MRDS to the groundwater. Environmental data indicates that the goals are being met.

**B. Adequacy of O&M**

Describe issues and observations related to the implementation and scope of O&M procedures. In particular, discuss their relationship to the current and long-term protectiveness of the remedy.

O&M ~~at~~ at the site is very good. Long-term protectiveness requires that a restrictive covenant be implement for the MRDS. Also, other ICs may be needed pending completion of the IC study currently in progress.

**C. Early Indicators of Potential Remedy Problems**

Describe issues and observations such as unexpected changes in the cost or scope of O&M or a high frequency of unscheduled repairs, that suggest that the protectiveness of the remedy may be compromised in the future.

None

**D. Opportunities for Optimization**

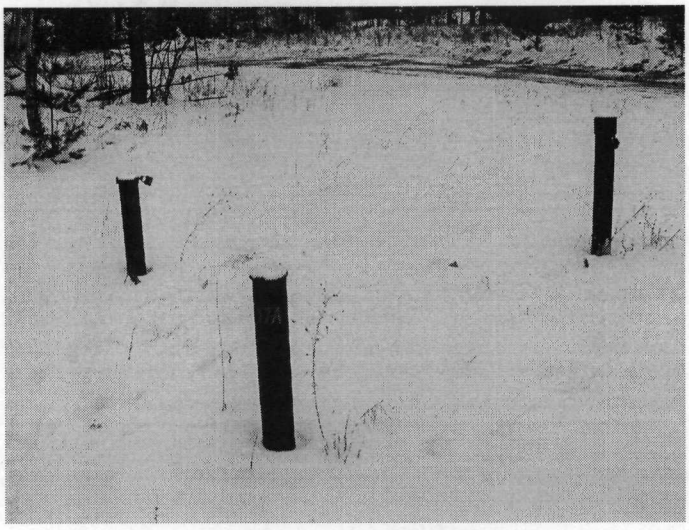
Describe possible opportunities for optimization in monitoring tasks or the operation of the remedy.

Modification of groundwater monitoring program & abandonment of unnecessary monitoring wells should be completed.

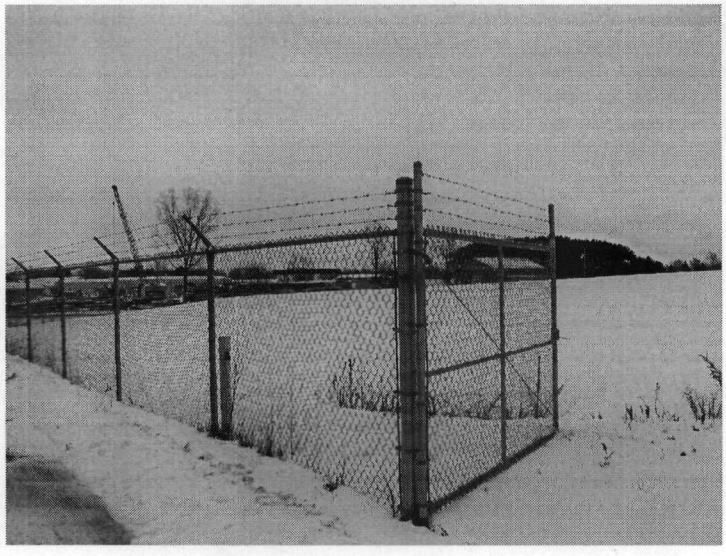
Photographs

Eastern Disposal Site at NE Corner of NPI Property

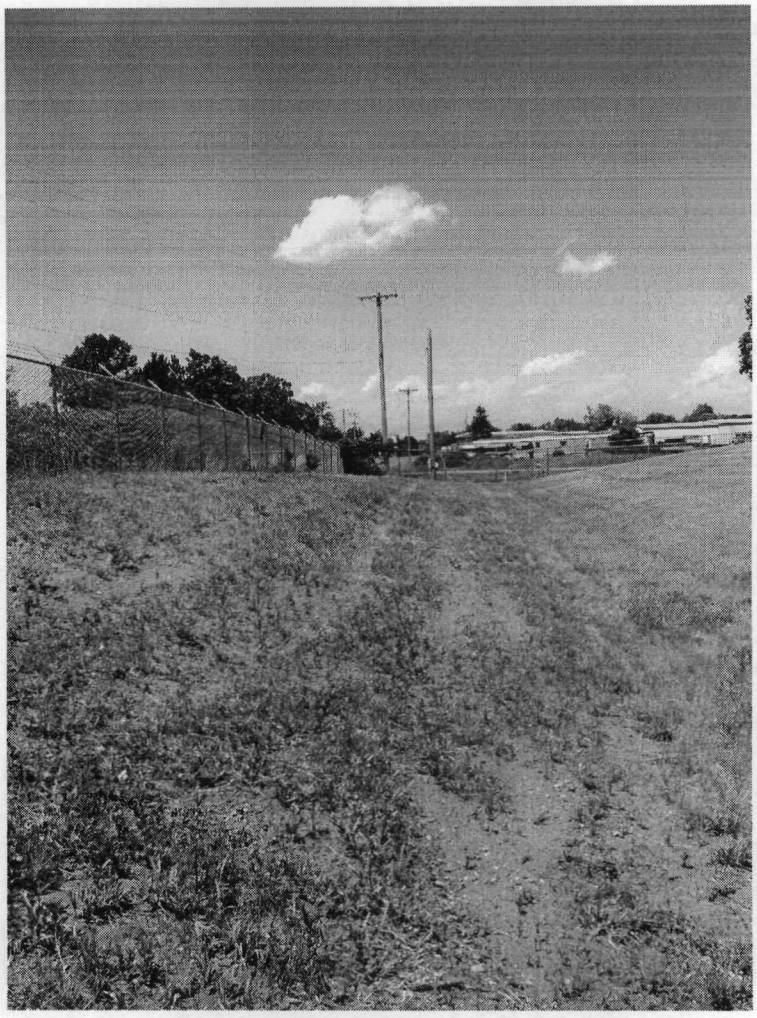

Eastern Disposal Site – with "No Trespassing" sign.



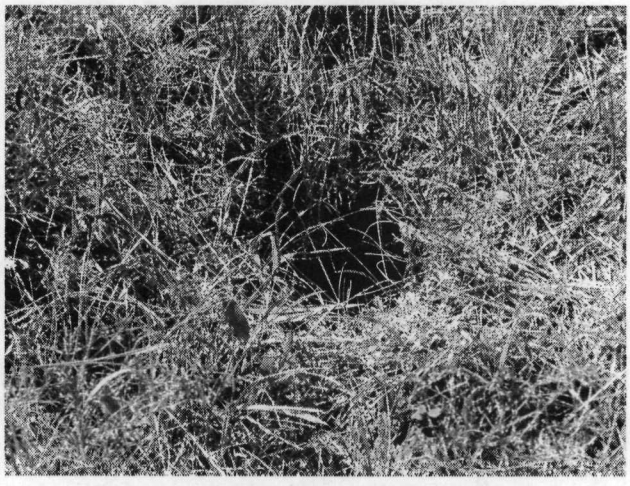
Monitoring wells MW-17 nest at EDS



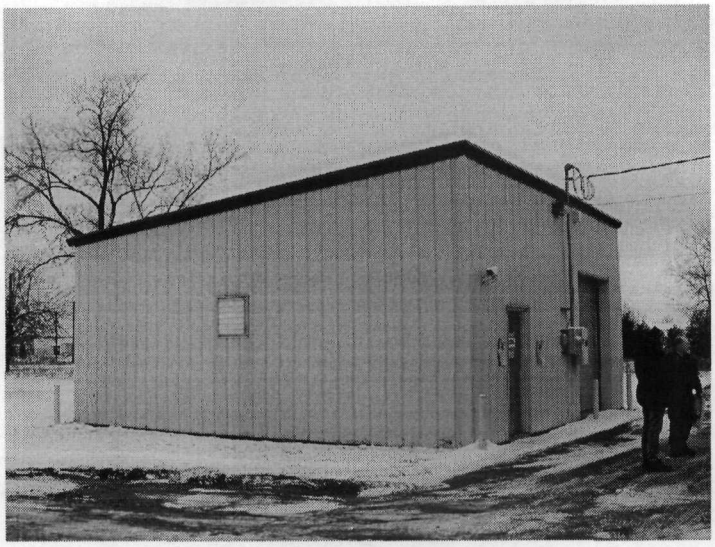
MRDS fence and gate



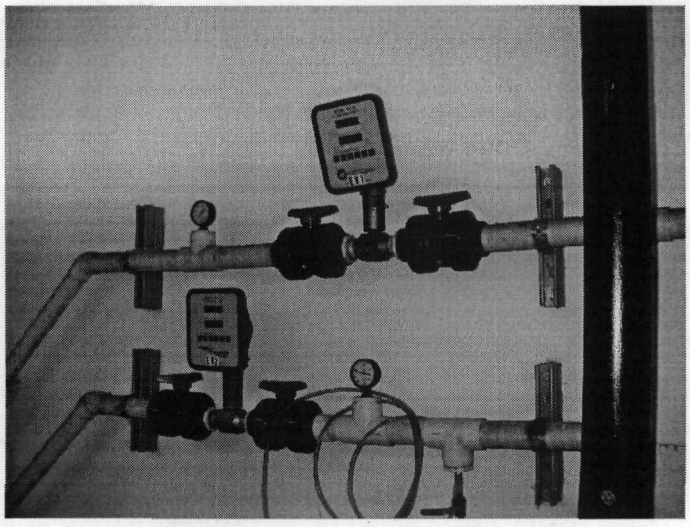
Ditch at perimeter of MRDS capped area



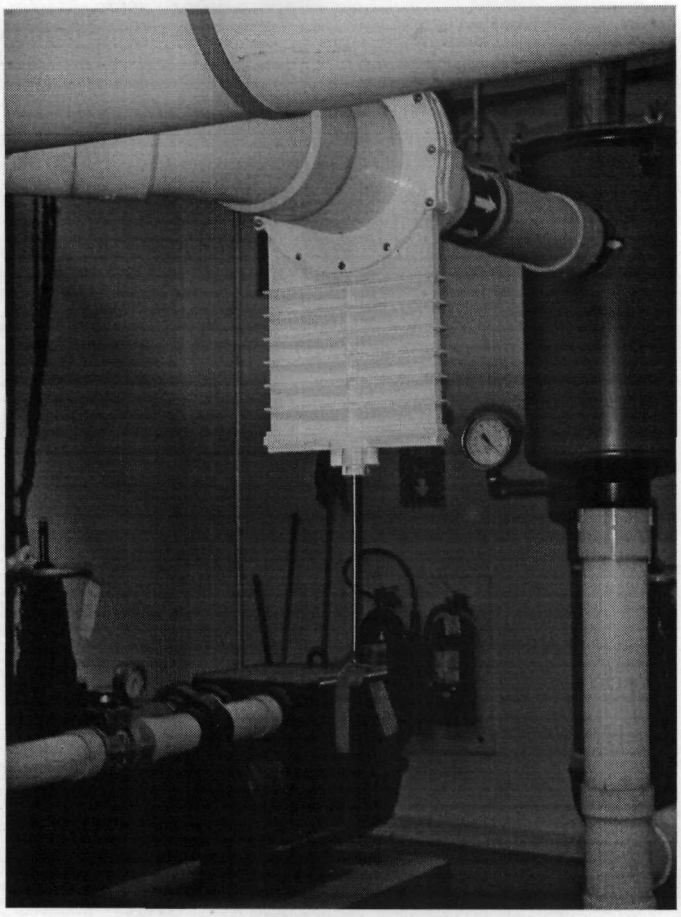
Small animal burrow in MRDS cap



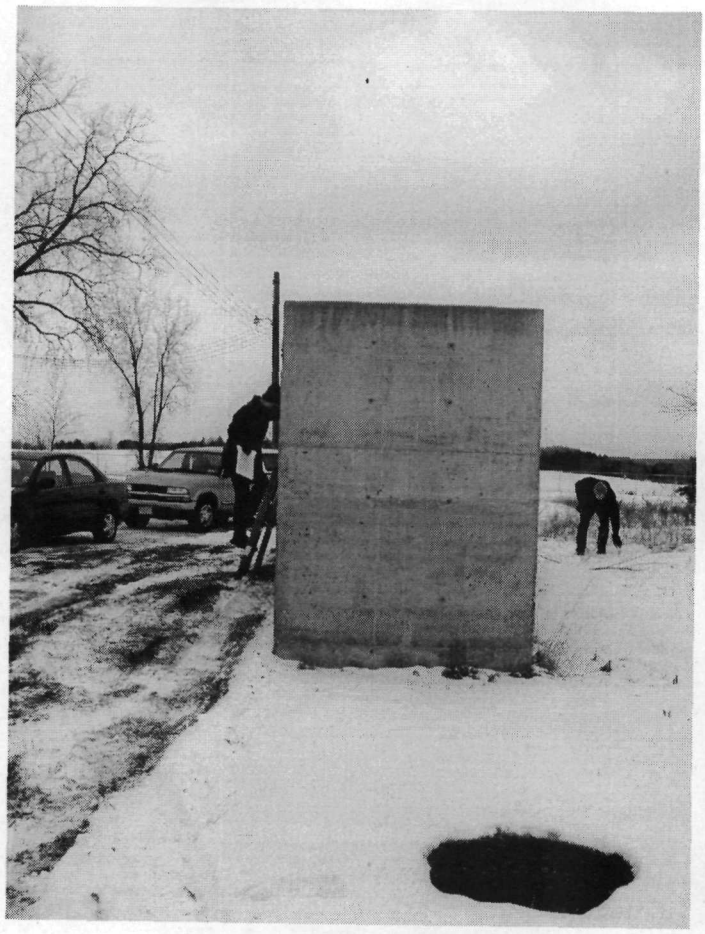
MRDS SVE System Building



MRDS Interior of System Building
Groundwater extraction well gauges

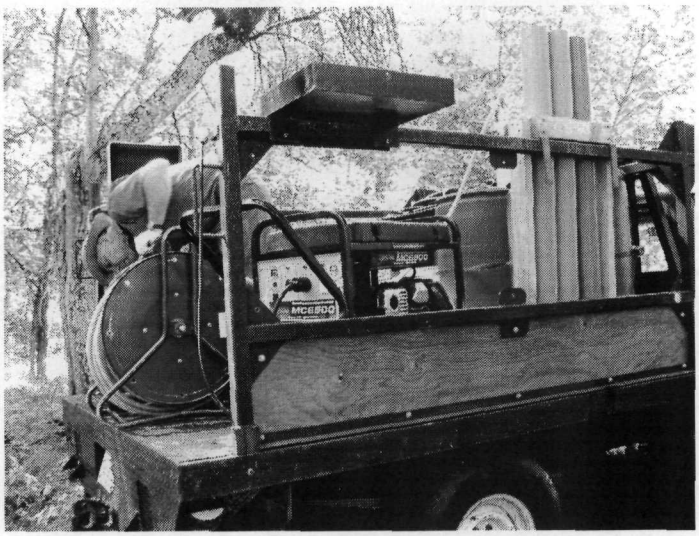


One of SVE system blowers

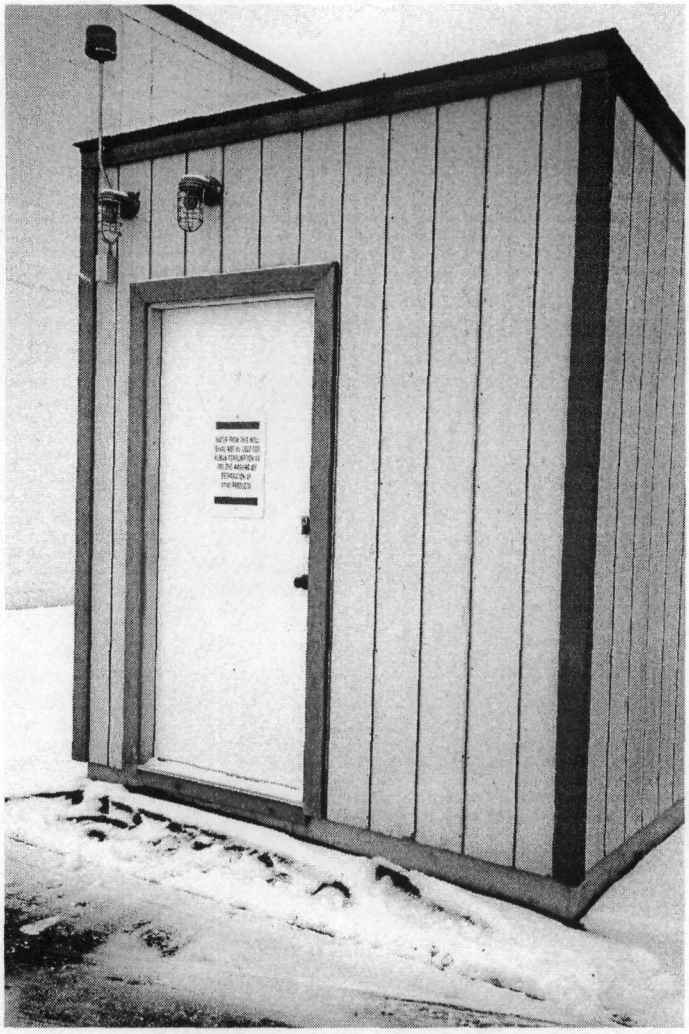


Cascade Aerator #1

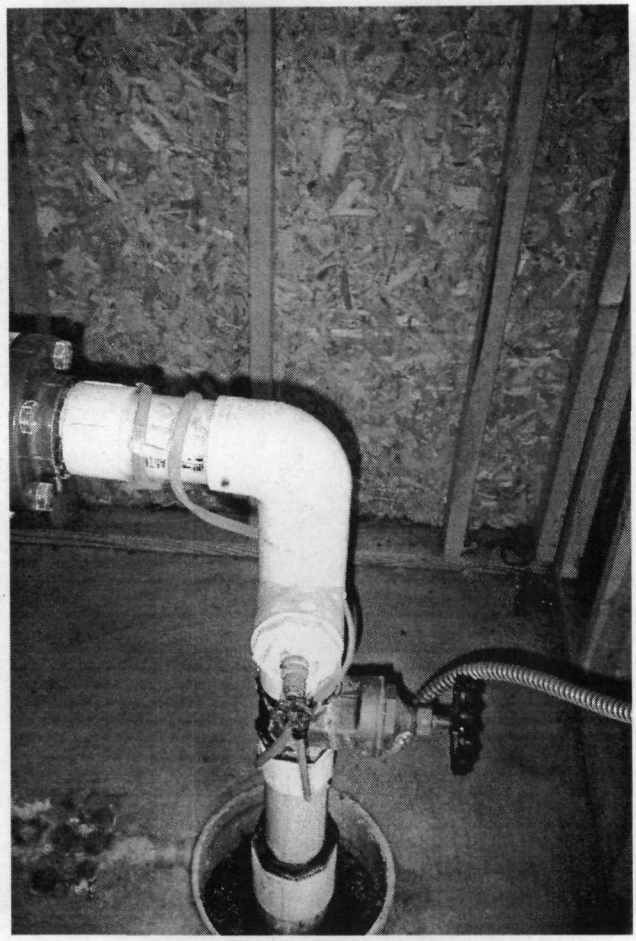
Cascade Aerator #1



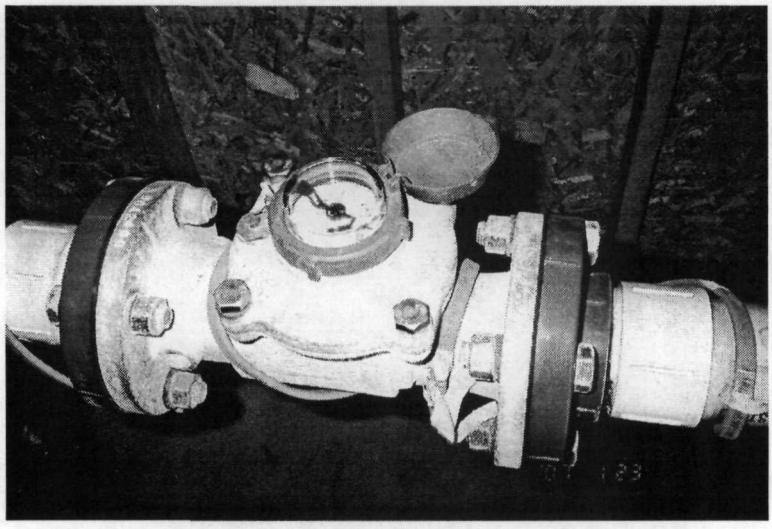
Vehicle used during groundwater sampling events



Shed that shelters EW 3 wellhead and EW 3 and EW 5 electrical panel

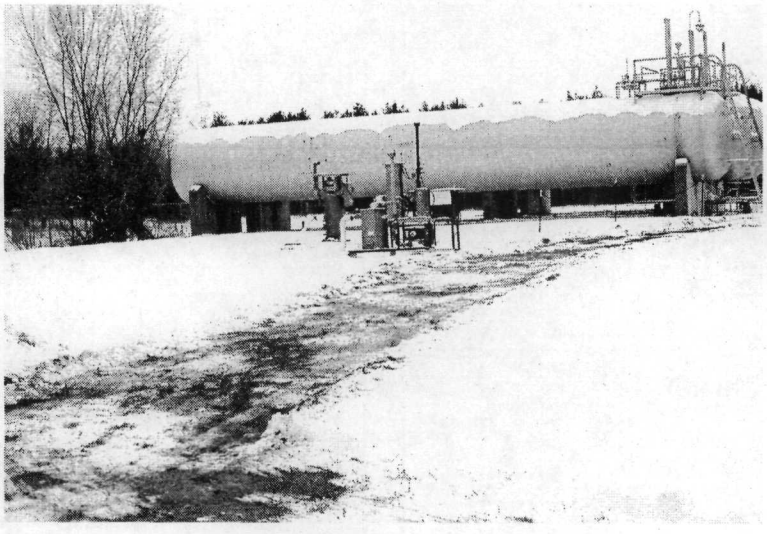


Extraction Well EW 3



EW 3 gauge


EW 5 electrical panel



Southwest Corner of NPI Property
SVE system in TCE disposal area
(Large tanks are not related to Superfund activity)

Interview Report

**INTERVIEW DOCUMENTATION FORM**

The following is a list of individual interviewed for this five-year review. See the attached contact record(s) for a detailed summary of the interviews.

| Name | Title/Position | Organization | Date |
|---|---|---|---|
| Derrick Paul | Cash Manager | NPI | 1/31/07 |
| Marcus Kobliska | Maint. Super. | NPI | 1/31/07 |
| Jeff Pippinger | Utilities Adm. | City of Eau Claire | 1/25/07 |
| ~~Jo~~ Scott Schnobrich | Water Supply Tech. | Lake Hallie Village | 6/19/2007 |
| Randall McAnally | nearby resident | | 8/20/07 |
| Helen Williamson | nearby resident | | 8/20/07 |

Sandra Ahrens nearby resident 8/20/07

# INTERVIEW RECORD

| | | |
|---|---|---|
| **Site Name:** National Presto Industries | | **EPA ID No.:** WID006196174 |
| **Subject:** Superfund Cleanup | | **Time:** 10:30 **Date:** 1/31/07 |
| **Type:** ☐ Telephone ☒ Visit ☐ Other<br>**Location of Visit:** | | ☐ Incoming ☒ Outgoing |

**Contact Made By:**

| | | |
|---|---|---|
| **Name:** Eileen Kramer | **Title:** Hydrogeologist | **Organization:** Wisc. DNR |

**Individual Contacted:**

| | | |
|---|---|---|
| **Name:** Derrick Faul | **Title:** Cash Manager | **Organization:** Nat'l Presto |
| **Telephone No:** 715-839-2141<br>**Fax No:**<br>**E-Mail Address:** dpaul@gopresto.com | | **Street Address:** 3925 N. Hastings Way<br>**City, State, Zip:** Eau Claire, WI 54703 |

**Summary Of Conversation**

Over past 5 years, has been straight routine. Derrick provides Presto's oversight of the cleanup.
Some past communications from EPA have been slow, but appears to be improving.

Communications from DNR have been OK

No complaints or concerns expressed by community

Only request to abandon monitoring well received.

Does not have written safety plan.

Has heard of no concerns from Village of Hillie or EC Hum. wellfield.

# INTERVIEW RECORD

| | | | |
|---|---|---|---|
| Site Name: National Presto Industries | | EPA ID No.: WIDOO1961974 | |
| Subject: Superfund cleanup | | Time: 1/31/07 | Date: 1/00 |
| Type: ☐ Telephone ☒ Visit ☐ Other<br>Location of Visit: | | ☐ Incoming ☒ Outgoing | |

**Contact Made By:**

| | | |
|---|---|---|
| Name: Eileen Kramer | Title: Hydrogeologist | Organization: Wisc. DNR |

**Individual Contacted:**

| | | |
|---|---|---|
| Name: Marcus Kokliska | Title: Maint. Super. | Organization: NPI |
| Telephone No: 715-839-2121<br>Fax No:<br>E-Mail Address: | Street Address: 3925 N. Hastings Way<br>City, State, Zip: Eau Claire, WI 54703 | |

**Summary Of Conversation**

S.t. receives a casual question from Versm Const as to how long cleanup will take

contracts out root cleanout from WW discharge lines about 1/yr.

Electric work contracted out.

Follows confined space protocol when working in EW1 + EW2 + EW5 manholes

Collects samples from aerators manholes, + pumping wells

Provides truck + clean water for monitoring well sampling.

Receives direction from Bennett Fleming on O+M tasks

# INTERVIEW RECORD

| | | |
|---|---|---|
| **Site Name:** National Presto Industries | | **EPA ID No.:** |
| **Subject:** E.C. Mun. Wellfield is receptor of NPI plume | **Time:** NOON | **Date:** 1/25/07 |
| **Type:** ☐ Telephone ☒ Visit ☐ Other<br>**Location of Visit:** City wellfield + water treatment plant, | ☐ Incoming ☒ Outgoing<br>Riverview Dr., Eau Claire | |

**Contact Made By:**

| | | |
|---|---|---|
| **Name:** Eileen Kramer | **Title:** Hydrogeologist | **Organization:** Wisc. DNR |

**Individual Contacted:**

| | | |
|---|---|---|
| **Name:** Jeff Pippinger | **Title:** Utilities Administ. | **Organization:** City of Eau Claire |
| **Telephone No:** 715-839-4920<br>**Fax No:** 715-839-1693<br>**E-Mail Address:** jeff.pippinger@ci.eau-claire.wi.us | **Street Address:** 910 Forest St.<br>**City, State, Zip:** Eau Claire, WI 54703 | |

**Summary Of Conversation**

Favorably impressed w/ S/F cleanup.
There has been good communication.
NPI pays some percentage of costs.
cost of running stripper
cost of loss of efficiency

Would like to receive the NPI annual reports every year.

Within 6-12 mos will be evaluating next 20 years needs for water. Could possibly include additional wells which would most likely need to be to north to avoid excess iron + manganese.

# INTERVIEW RECORD

| | | | |
|---|---|---|---|
| **Site Name:** National Presto Industries | | **EPA ID No.:** WID006196174 | |
| **Subject:** 5 year review | | **Time:** 13:45 | **Date:** 6/19/07 |
| **Type:** ☐ Telephone ☒ Visit ☐ Other<br>**Location of Visit:** | | ☐ Incoming ☒ Outgoing | |

**Contact Made By:**

| | | |
|---|---|---|
| **Name:** Eileen Kramer | **Title:** Hydrogeologist | **Organization:** Wisc. DNR |

**Individual Contacted:**

| | | |
|---|---|---|
| **Name:** Scott Schnobrich | **Title:** Water Supply Tech'n | **Organization:** Village of L. Hallie |

| | |
|---|---|
| **Telephone No:** 715-723-5488<br>**Fax No:**<br>**E-Mail Address:** | **Street Address:** 13143 30th Ave<br>**City, State, Zip:** Chippewa Falls, WI 54729 |

**Summary Of Conversation**

Village supplies 1350 connections.
Usage = about 750,000 gallons per day
Would like to receive more information about progress of cleanup.

All properties in impacted groundwater area in Village are connected to public water.

# INTERVIEW RECORD

| | | | |
|---|---|---|---|
| **Site Name:** National Presto Industries | | **EPA ID No.:** WID006196174 | |
| **Subject:** 5 Year Review | | **Time:** 8/20/07 | **Date:** 1 PM |
| **Type:** ☐ Telephone ☒ Visit ☐ Other<br>**Location of Visit:** | | ☐ Incoming ☒ Outgoing | |

**Contact Made By:**

| | | |
|---|---|---|
| **Name:** Eileen Kramer | **Title:** Hydrogeologist | **Organization:** Wisc. DNR |

**Individual Contacted:**

| | | |
|---|---|---|
| **Name:** Randall McAnelly | **Title:** Nearby resident | **Organization:** |
| **Telephone No:** 715-552-2769<br>**Fax No:**<br>**E-Mail Address:** | **Street Address:** 3546 Locust La<br>**City, State, Zip:** Eau Claire, WI 5470 | |

**Summary Of Conversation**

Has had no concerns w/ superfund work at NPI.

# INTERVIEW RECORD

| | | |
|---|---|---|
| Site Name: National Presto Industries | | EPA ID No.: WIDOO6196174 |
| Subject: 5 Year Review | | Time: 3PM Date: 8/20/07 |
| Type: ☐ Telephone ☒ Visit ☐ Other<br>Location of Visit: | | ☐ Incoming ☒ Outgoing |

**Contact Made By:**

| | | |
|---|---|---|
| Name: Eileen Kramer | Title: Hydrogeologist | Organization: Wisc. DNR |

**Individual Contacted:**

| | | |
|---|---|---|
| Name: Helen Williamson | Title: Nearby resident | Organization: |
| Telephone No: 715 - 5~~2~~52 - 5292<br>Fax No:<br>E-Mail Address: | Street Address: 3532 Locust La.<br>City, State, Zip: Eau Claire, WI 54701 | |

**Summary Of Conversation**

Has had no concerns with superfund cleanup work.
Sees deer entering property.
Her home was connected to Eau Claire city water because of NPI contamination. She has no complaints or concerns about this.

# INTERVIEW RECORD

| | | |
|---|---|---|
| **Site Name:** National Presto Industries | | **EPA ID No.:** WID |
| **Subject:** 5 Year Review | | **Time:** 2 pm **Date:** 8/20/07 |
| **Type:** ☐ Telephone ☒ Visit ☐ Other<br>**Location of Visit:** | | ☐ Incoming ☒ Outgoing |

**Contact Made By:**

| | | |
|---|---|---|
| **Name:** Eileen Kramer | **Title:** Hydrogeologist | **Organization:** Wisc. DNR |

**Individual Contacted:**

| | | |
|---|---|---|
| **Name:** Sandra Ahrens | **Title:** Nearby resident | **Organization:** |
| **Telephone No:** 715-514-0588<br>**Fax No:**<br>**E-Mail Address:** | **Street Address:** 3647 Halliela<br>**City, State, Zip:** Eau Claire, WI 54701 | |

**Summary Of Conversation**

Has had no concerns about cleanup work for superfund at site.

Considers the fence that faces her property unsightly.

Public Notice of Five Year Review

logistical standpoint.

"The entire unit at Winnebago has 20 beds and presently 16 are filled," Santala said.

"With the capacity at Northern Center we can serve 30, and we'll take some of those 30 beds and serve these children."

Santala calls Northern Center's Brookside facility: "very modern in a state-of-the-art way." The facility would provide its residents

Winnebago by April. "We will not admit new clients at Winnebago come August 1. From April, on, new clients would be admitted to Northern Center," she said.

The department's priority right now is to transition the Winnebago staff into new jobs at that facility.

"We need to make sure that great staff has jobs," Santala said.

As far as Northern Center is concerned, current employees have been allocated to serve the new program at Brookside, she said.

Local Northern Center administrators declined comment on the Winnebago transfer.

*Reach Jeffrey Hage at jeff.hage@lee.net.*

## su | do | ku

Answer

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 4 | 5 | 8 | 6 | 7 | 9 | 2 | 1 | 3 |
| 3 | 1 | 6 | 2 | 8 | 5 | 9 | 7 | 4 |
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| 7 | 9 | 2 | 1 | 5 | 4 | 8 | 3 | 6 |
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| 1 | 7 | 9 | 8 | 6 | 3 | 4 | 2 | 5 |
| 6 | 8 | 4 | 5 | 1 | 2 | 3 | 9 | 7 |
| 2 | 3 | 5 | 4 | 9 | 7 | 6 | 8 | 1 |



JEREMY P(

## *Slip sliding away*

Alec Wilbright, 8, of Dubuque, Iowa, slides on the ice skating rin Flora Park Tuesday in Dubuque, Iowa.

# Melee breaks out after gam

MILWAUKEE (AP) — Fighting broke out at the end of a hard-fought city high school basketball game Tuesday night, preventing officers from getting to a woman believed to be having a seizure, so dozens of police squads were called in to restore order, officials said.

An 18-year-old woman apparently was having the seizure just as fans had spilled onto the court at Bradley Tec which had just beaten Bay View 82-81 in overtime.

When fights broke out and officers couldn't get to the woman to render aid, they called for any available squad to respond to the school, said police spokeswoman Anne E. Schwartz.

"Dozens of squads responded," she said.

In addition to the 18-year-ol woman, a 15-year-old was injured, as were four officers, but none of the injuries was serious, Schwartz said.

She said there were about 10 arrests made.







**Wisconsin Department of Natural Resources to Review National Presto Industries Cleanup • Eau Claire, Chippewa County, Wisconsin**

In accordance with Superfund law the Wisconsin Department of Natural Resources is conducting a Five Year Review of the National Presto Industries cleanup. These reviews are done where construction of the cleanup is complete but hazardous waste remains on the site. Soil and groundwater have been contaminated with volatile organic compounds and cadmium related to past manufacturing and disposal practices. The remedy at the site includes groundwater extraction, vapor extraction, an engineered on-site landfill, excavation and treatment and disposal of hazardous wastes, an alternate water supply for Hallie residents, and treatment of drinking water at the Eau Claire Municipal Well Field. The purpose of this review is to verify that the remedy continues to protect human health and the environment.

The public is invited to comment and provide input. To comment or to obtain additional information contact:

**Eileen Kramer - Hydrogeologist**
**Wisconsin Department of Natural Resources**
**1300 W. Clairemont Ave. • P. O. Box 4001 • Eau Claire, WI 54702**
**715-839-3824 • E-mail: eileen.kramer@wisconsin.gov**

The five-year review report will be completed September 28, 2007.

Chippewa Herald 1/31/2007

ny Matson
uld like to
family and
s to join her
ebrating her
**birthday.**

ewa Manor
sing Home
ng Room,
apman Rd.,
ewa Falls
10, 2007
4:00 p.m.

Birthday

Deal
!!!*
nth of
Lodge
items
ek!

October 5, 1941 -
February 6, 2005

*Two years ago the Lord called you from us. We miss you everyday. Things are just not the same, we have this empty feeling in our hearts.*

*We miss you soooo much.*

*Love,*

*Wife & Family*

## BASEBALL INSTRUCTIONAL CLINICS

**at Thorp H.S. for grades 5 - 12**

$20 for one camp • $35 for two camps • $50 for all three

| PITCHERS & CATCHERS | HITTERS | DEFENSE |
|---|---|---|
| Febuary 10 | March 17 | March 17 |
| 3:30 PM - 6 PM | 9 AM - NOON | 1 PM - 3:30 PM |

**For More Information Contact**
Coach Shawn Peck
608-386-1906 • speck@thorp.k12.wi.us
Featuring Some Professional Players

### Wisconsin Department of Natural Resources to Review National Presto Industries Cleanup • Eau Claire, Chippewa County, Wisconsin

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**715-839-3824 • E-mail: eileen.kramer@wisconsin.gov**

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# Life Lessons

## Share your life lessons.

**The Chippewa Herald is asking for reader submission to compile its "life lessons" themed Progress 2007 special section.**

**Current or former Chippewa Valley residents are invited to submit answers.**
**By submitting your answers, you grant The Chippewa Herald permission to contact you for additional details and verification. The Herald must verify personal information for answers to be published.**

# ıotes flaws in Iraq policy

WASHINGTON (AP) Adm. William Fallon, ho is poised to become the p American commander the Middle East, says .e United States miscal- ılated the ability of Iraqi rces to take control and ıderestimated the enemy's ersistence.

"Securing the stabil- y of the country has been ore difficult than antici- ıted," Fallon said in a writ- n statement to the Senate rmed Services Commit- e. "Our ability to correctly sess the political, eco- omic and security situation Iraq has been lacking."

Fallon's remarks were ıbmitted in advance of a confirmation hearing today. Fallon, who commands troops in the Pacific region, has been tapped to replace Army Gen. John Abizaid as head of the U.S. Central Command.

Today the Senate Foreign Relations Committee also was expected to consider the nomination of John Negroponte, the first director of national intelligence, to become deputy secretary of state.

Fallon and Negroponte's confirmations were not expected to rouse Senate protests despite bitter opposition in Congress to Bush's plan to send 21,500 additional troops to Iraq.

freezing other accounts. Veterans would receive $3.5 billion over last year for medical coverage, while active duty fighters and their families would benefit from a 6 percent increase.

The maximum Pell Grant for lower-income college students would increase by $260 to $4,310. While modest, it's the first increase since 2003.

Any spending package adopted by the House must eventually also make it through the Senate.


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lled, and 39 were wounded ı that attack, police Maj. lriss Mohammed said, add- ıg that most of the victims ere Shiite Kurds, who com- rise the majority in the ty, about 90 miles north- ıst of Baghdad. Most Kurds :e Sunni, but a minority are hiite.

The two bombings ccurred on the edge of the olatile Diyala province, here fighting has raged for eeks between Sunni insur- ents, Shiite militiamen and .S.-Iraqi troops.





## Wisconsin Department of Natural Resources to Review National Presto Industries Cleanup Eau Claire, Chippewa County, Wisconsin

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Eau Claire, WI 54702

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400457 1-30-07

U.S. EPA Letter of Dec. 13, 2006
Requiring NPI to Conduct an
IC Study

Dec. 28, 2006 Communication
From NPI's Consultant Expressing
Intent to Comply

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604-3590

REPLY TO THE ATTENTION OF:

SR-6J

December 13, 2006

**CERTIFIED MAIL**
**RETURN RECEIPT REQUESTED**

Mr. Derrick Paul
Project Coordinator
National Presto Industries, Inc.
3925 N. Hastings Way
Eau Claire, WI 54703

Re: National Presto Industries and Eau Claire Municipal Well Field Superfund Sites; Request for Institutional Control Study, Eau Claire, Wisconsin; Consent Decree 93C-0610C; Administrative Orders for Remedial Action: V-W-91-C-091, V-W-92-C-156 and V-W-96-C-363

Dear Mr. Paul:

The U.S. Environmental Protection Agency ("EPA") is undertaking an initiative to evaluate institutional controls ("ICs") at Superfund sites. ICs may be needed to restrict uses of sites where on-site hazardous substances remain above levels that allow for unlimited use and unrestricted exposure. ICs may be necessary to prevent interference with Superfund remedy components. A description of EPA's IC initiative may be found in "Strategy to Ensure Institutional Control Implementation at Superfund Site, "OSWER No. 9355.0-106 (2004), http://www.epa.gov/superfund/action/ic/strategy.htm.

EPA is seeking the cooperation of potentially responsible parties as part of this nationwide effort. The purpose of this letter is to seek your assistance in evaluating ICs for the National Presto Industries and Eau Claire Municipal Well Field Superfund Sites ("the Sites"), located at Eau Claire, Wisconsin. Specifically EPA is requesting that you submit an IC investigation/study to EPA within **45 days of receipt of this letter.** Please provide EPA with a notice of intent to comply with this request **within 10 days of the date of receipt of this letter.**

The IC investigation/study will be used by EPA in its current review of the remedial action for the Site pursuant to Section 121 of the Comprehensive Environmental Response, Compensation and Liability Act ("CERCLA"), 42 U.S.C. § 9621. Section 121 of CERCLA mandates that, no less often than every five years, EPA must review

remedial actions where hazardous substances, pollutants or contaminants remain in place to assure that human health and the environment is being protected by the remedial action.

As you know, National Presto Industries, Inc. ("NPI") and National Defense Corporation ("NDC") has implemented remedial actions for the Sites pursuant to Consent Decree 93C 0610C and Administrative Orders for Remedial Action, V-W-91-C-091, V-W-92-C-156 and V-W-96-C-363 ("AO"). The Site remedy does not allow unlimited use and unrestricted exposure. The long term protectiveness, effectiveness and integrity of the remedy depend on compliance with ICs that implement the following land/groundwater restrictions:

Examples:

| **Restricted Areas** (Areas that do not allow unlimited use or unrestricted exposure) | **Institutional Control Objective/ Restriction/Performance Standard** |
|---|---|
| Area of the Site where soil has been remediated to commercial/industrial cleanup levels | Prohibit residential use of the areas |
| Site remedial components: e.g., groundwater pump and treat system | Prohibit interference with the system |
| Area of the Site where the groundwater plume exceeds MCLs | Prohibit consumptive use of the groundwater plume area until MCLs are achieved |
| Area of Site with RCRA Subtitle C or D landfill cap | Prohibit interference with the cap |

Under Paragraph 4.b. of Section V (Reimbursement of Response and Operation and Maintenance Costs) of 93C 0610C, National Presto Industries, Inc. and National Defense Corporation agreed to "be liable for all Operation and Maintenance Costs until such time that EPA determines, consistent with the final Record of Decision for the National Presto Industries, Inc. Superfund site, that the obligation shall cease."

Under paragraph 87 of Section XXII (Modification and Modification to Work) of V-W-91-C-091, EPA ordered National Presto Industries, Inc. and National Defense Corporation, "U.S. EPA may determine that modifications to the Work required by this Order and Appendices to this Order are necessary to complete the Remedial Action. If U.S. EPA determines that modifications to the Work are necessary, U.S. EPA may require Respondents to submit a Supplemental Work Plan for additional response activities. U.S. EPA may also require Respondents to modify any plan, design, other deliverable, or any element of Work required by this Order.

Under paragraph 59 of Section VIII (Additional Response Actions) of V-W-92-C-156, EPA ordered National Presto Industries, Inc. and National Defense Corporation, "In the event that EPA determines that additional work or modifications to Work are necessary to meet applicable Performance Standards or that modifications to Work are necessary to

maintain consistency with the final remedy, EPA will notify respondents that additional response actions are necessary." Paragraph 61 of Section VIII further states, "Under Section 121(c) of CERCLA, 42 U.S.C. 9621 (c), and any applicable regulations, EPA may review the site to assure that the work performed pursuant to this Order adequately protects human health and the environment. Until such time as EPA certifies completion of the Work, Respondents shall conduct the requisite studies, investigations, or other response actions as determined necessary by EPA in order to permit EPA to conduct the review under Section 121(c) of CERCLA. As a result of any review performed under this paragraph, Respondents may be required to perform additional Work or to modify Work previously performed."

Under paragraph 54 of Section IX (Additional Response Actions) of V-W-96-C-363, EPA ordered National Presto Industries, Inc. and National Defense Corporation, Inc., "In the event that U.S. EPA determines that additional Work or modifications to Work are necessary to meet Performance Standards, to maintain consistency with the final remedy, or to otherwise protect human health or the environment, U.S. EPA will notify Respondents that additional response actions are necessary. U.S. EPA may also require Respondents to modify any plan, design, or other deliverable required by this Order, including any approved modifications.

The IC investigation/study is necessary for EPA to conduct its review of whether the remedial action is protective of human health and the environment.

The goals of the IC investigation/study are: a) to evaluate whether institutional controls currently exist that adequately implement the objectives/performance standards described above; b) identify and recommend any corrective measures to existing ICs necessary for their effectiveness; and c) to recommend any new or additional ICs necessary to achieve and maintain the objectives/performance standards described above.

**IC Study Report Requirements**

Within 45 days of receipt of this letter, please submit a draft IC investigation/study report to EPA for review and approval that includes the following minimum requirements:

1. **Current Map of Restricted Areas:** Provide a map that identifies the current boundaries of the restricted areas (that do not allow unlimited use and unrestricted exposure), boundaries of the Site, streets, easements, property ownership, and assessor's parcel number or other recorded plat or survey information;

2. **GIS Information:** Provide Geographic Information System ("GIS") coordinates that show the current boundaries of restricted areas and boundaries of the Site. Identify the accuracy of the coordinates (i.e. within 0.01 feet). A licensed surveyor shall provide certification that all coordinates are accurate within 0.01 feet. Please format the coordinates of the restricted areas and boundaries into an ESRI polygon-shape file. The shape file shall be projected into the UTM, and

boundaries into an ESRI polygon-shape file. The shape file shall be projected into the UTM, NAD 83 projection system. Provide an attribute name in the shape file for each polygon submitted. For example: "site boundary", "no restrictions", "recreational only", "industrial only";

3. **Documentation on Existing Proprietary Controls:** Provide copies by the Recorder of Deeds (or other appropriate land records office) showing the clerk's recording stamps of existing proprietary controls (environmental restrictive covenants/easements etc.) for the restricted areas described above. Provide an aerial map that depicts the boundaries of the restricted area covered by the existing proprietary control, streets, easements, property ownership, and parcel numbers. Assess and discuss whether the boundaries of the area covered by existing proprietary controls match the boundaries of restricted areas based on current information;

4. **Assessment of Existing Proprietary Controls:**

   a. Title Evaluations:

      i) Obtain from a title company a title insurance commitment using ALTA Commitment Form 1982 as amended "for information only purposes" for the restricted areas. Include copies of documents referenced in the title commitment. Include copies of encumbrances, utility right of ways, leases, and subleases impacting restricted areas;

      ii) Discuss whether the title commitment identifies/exempts existing proprietary controls for restricted areas;

      iii) Provide an aerial map that identifies parcel numbers and boundaries of current encumbrances (such as utility easements) that impact restricted areas. Discuss efforts to obtain subrogation agreements for such encumbrances. Include copies of subrogation agreements that have or will be obtained for such encumbrances.

   b. Assess and discuss whether existing proprietary controls have been executed in a legally enforceable manner. Discuss whether a grantee or prior owner "holds" the proprietary controls. Discuss whether the current owner is under an obligation for compliance with the land and groundwater restriction described above. Discuss whether existing proprietary controls "run with the land" (i.e. restrictions are binding on subsequent property owners). Discuss whether existing proprietary controls implement the IC objectives/performance standards described above.

5. **Documentation on Government Controls:** Identify and provide a current, dated and official copy of existing governmental controls [ordinance, statutes, etc.] that implement the IC objectives/performance standards for the restricted areas described above. Discuss whether the governmental control restricts all areas of unlimited use and unrestricted exposure at the Site. Indicate whether the governmental control contains a figure showing the current boundaries of the unrestricted areas based on most recent information? Indicate where to obtain information about the governmental control [ordinance]? Explain how affected parties such as homeowners, contractors and resource users can obtain information about the governmental control? Indicate whether the governmental agency has up-to-date maps of restricted areas? If such map is available, secure and provide a copy. Discuss whether affected parties and resource users are aware of and understand the restrictions described above? Have there been breaches of the use restriction described above? If so, how were they addressed by the governmental agency?

6. **Discuss compliance with Institutional Controls:** Discuss whether the property is being used in a manner consistent with the restrictions in the Consent Decree. Conduct site inspections and interviews with owners, lessees and other holders of property interests, and summarize the results. Indicate whether owners, lessees and other holders of property interests aware of and complying with the restrictions? Indicate whether land use or expected land use on or near the site has changed since execution of the ROD, Explanation of Significant Differences ("ESD") and ROD Amendment? Indicate whether there are any new developments, either constructed or planned, in the area? Indicate whether there are any new construction permits pending? Indicate whether the property owner has any plans to sell or transfer the property?

7. Assess **monitoring:** Discuss how, when, and by whom compliance with the institutional controls is monitored. Discuss whether the results of the IC monitoring are routinely and promptly shared with EPA and the State. Discuss whether there are measures in place to ensure that modifications to the restriction require EPA and the State approval;

8. **Discuss effectiveness of Institutional Controls:** Discuss whether existing ICs are preventing exposure to hazardous wastes, pollutants or contaminants. Discuss whether there is potential human or ecological exposure. Discuss whether land and/or resource use has changed since execution of the ROD, ESD and ROD Amendment. If land or resource use has changed, discuss the plans regarding property's ICs. Discuss how the current land and resource uses relate to exposure assumptions and risk calculations. Discuss whether there are any unintended consequences resulting from the use of a particular restriction. Assess whether the controls (or lack of controls) are effective in the short term in maintaining land/groundwater restrictions above, maintaining performance standards and preventing exposure. Assess whether the control (or lack of controls) will be

effective in the long term in maintaining the land and groundwater restrictions above, maintaining remedy performance standards and preventing exposure;

9. **Recommendations:** Propose any corrections to existing institutional controls that are necessary to ensure that the land and groundwater use restrictions described, above, are implemented correctly, are maintained and will be protective in the short term and the long term. Propose controls for remaining areas that do not support unlimited use and unrestricted exposure, but are not covered by existing controls. Include a title commitment for any proposed proprietary control. Propose subrogation agreements for any encumbrance that negatively impacts restricted areas. Propose subrogation agreements for any encumbrance that negatively impacts restricted areas. Propose monitoring requirements and modifications to the Operation and Maintenance Plan to ensure that ICs are maintained and complied with in the short term and in the long term. The monitoring plan must include a schedule and an annual certification to EPA that ICs are in place and remain effective.

Please provide EPA with a notice of intent to comply with this request **within 10 days of the date of receipt of this letter.** If you have any questions concerning this request, please contact me at 312 353 9685 or by email at caine.howard@epa.gov. You may also contact Larry Johnson, Associate Regional Counsel, at 312 886 6609 or by email at johnson.larry@epa.gov.

Sincerely,

Howard Caine
Remedial Project Manager
Superfund Division

cc: Dennis F. Kugle, Gannet Fleming, Inc.
Eileen Kramer, WDNR

"Kugle, Dennis F."
<dkugle@GFNET.com>
12/28/2006 01:57 PM

To Howard Caine/R5/USEPA/US@EPA

cc paul derrick <dpaul@gopresto.com>, "Olig, David J." <dolig@GFNET.com>, "Wright, Clifford C." <cwright@GFNET.com>, kramee@dnr.state.wi.us

bcc

Subject Dec. 13th Letter - Request for Institutional Control Study

History: This message has been replied to and forwarded.

Dear Howard,

On December 18th, Gannett Fleming received a copy of your December 13th letter to Derrick Paul requesting an Institutional Control (IC) Study for the National Presto Industries (NPI) site in Eau Claire, Wisconsin. In the letter you asked that NPI "provide EPA with a notice of intent to comply with this request **within 10 days of the date of receipt of this letter."**

**By this email and on behalf of NPI, Gannett Fleming is providing notice to EPA that they intend to comply with the agencies request to submit an IC investigation/study. Please let me know if a letter to EPA stating this is required.**

We do have a number of questions about the IC Study Report requirements that are listed in the letter and it is likely we will contact you to for clarification as we work on the study. One requirement that would be very difficult to complete within the 45 days that EPA has given NPI to complete the study is the "GIS Information" requested on pages 3 and 4 of the letter. Providing the required GIS coordinates for the current boundaries of the restricted areas and boundaries of the site to an accuracy of 0.01 feet would require a survey. Preparing a scope of work, retaining a surveyor and having a survey conducted by the end of January 2007 is not realistic. Also, before conducting what would likely be an expensive survey, NPI would want to reach agreement with EPA and WDNR on the list and boundaries of the restricted areas.

Gannett Fleming would ask that EPA consider waiving the GIS survey requirements and accept a site plan showing the boundaries of the restricted areas. This is all that is required for registry of a site on the WDNR's GIS public registry of sites where contaminated soils and/or groundwater remain.

As another point of clarification, it is not NPI's intent to survey the groundwater plume either on-site or off-site. We intend to provide a drawing/map with the IC Report showing the estimated on-site and off-site extent of impacted groundwater. Both the city of Eau Claire and the Town of Hallie have groundwater use ordinances in place that prohibit the use of private water supply wells and those ordinances will be provided with the IC report.

Sincerely,
Dennis Kugle
Gannett Fleming, Inc.
8025 Excelsior Drive
Madison, WI 53717
608-836-1500

Copy: Project File 34283.000

Copies of Institutional Controls

# Village of Lake Hallie
# Ordinance on Water Supply
# Cross Connections

From Village of Lake Hallie

**1.** Disconnection. If payment is not received within ten (10) days after mailing of the notice, service may be disconnected in accordance with the rules of the Public Service Commission. A fee shall be charged for reconnection as specified by Section 1.4.06. of the Village of Lake Hallie Code of Ordinances.

**2.** Lien on Property. All delinquent bills, if not paid by November 5 of that year, shall be certified to the Clerk/Treasurer and become a lien upon the property serviced pursuant to Sec. 66.069(1) Wis. Stats, as may be amended. A 10% administrative fee shall be added to the delinquent amounts.

**3.** The Village of Lake Hallie also reserves the right to collect delinquent bills in a civil action in a court of competent jurisdiction.

**(d)** Transfer. The Department shall be notified of transfer of service.

**(e)** Rental Property. An owner of rental property may request that bills be directed to tenants. In the event of non-payment, the owner shall be responsible for payment.

**(7)** Fire Protection.

**(a)** Hydrants. Water hydrants shall be located in the Village of Lake Hallie to facilitate fire protections services. The hydrants shall be used only by the Department or by the Fire District in the exercise of their official responsibilities. Use of water by the Fire District shall be charged in accordance with the rates approved by the Public Service Commission.

**(b)** Laterals to private hydrants or fire suppression systems may be permitted upon application and approval by the Department. The applicant shall submit a plan indicating the location of the suppression fixtures.

**(8)** Private Well Abandonment.

**(a)** All private wells on any parcel in the Village of Lake Hallie served by the public water system shall be abandoned within ten (10) days of connection to the system. The costs shall be paid by the owner. If the well is not abandoned within that time, the Department, upon ten days written notice to owner of the offending parcel, may perform the work and assess the cost against the property pursuant to Sec. 144.06 Wis. Stats. Upon approval of the Village Board, the Department may grant time extensions if strict enforcement would cause unnecessary hardship without commensurate public or private benefit.

Five (5)

**(b)** Exemption. A permit, valid for a period of ~~one (1) year,~~ may be granted for the continued operation of a private well provided all of the following apply:

**1.** The well and pump installation meet the requirements of Wis. Adm. Code NR 112 and a constructor's report is on file with the DNR, or if the well has been previously granted a certificate of acceptability from the DNR.

**2.** The well was in existence prior to January 1, 1991.

**3.** The well produces safe drinking water as evidenced by one sampling submitted with the permit application, and one every five years thereafter. The cost of the test shall be paid by the applicant.

**4.** There is no interconnection existing between the private well and the public water system.

**5.** The permit fee has been paid in the amount as referenced in Section 1.4.06. of the Village of Lake Hallie Code of Ordinances.

**6.** The well is used for irrigation, heat pump, or other outdoor activities.

**7.** Not more than nine (9) annual permits have been previously issued for the well.

**(c)** Abandonment. All wells, not otherwise exempt, shall be abandoned and filled in accordance wit the provisions of Wis. Adm. Code NR 112. The owner of the well shall provide the Department forty-eight (48) hours notice so that it may observe the abandonment process to assure compliance with this section.

**(d)** Reports. A report, in a form as approved by the DNR, shall be submitted to that agency and the Department within ten (10) days of abandonment.

**(9)** Sprinkling Ban. The Village of Lake Hallie and the Department reserve the right to declare a temporary ban on lawn sprinkling. This ban may be imposed when it is apparent, due to conditions of drought or extreme heat, that a shortage of water may or does exist that may prevent or hinder water supplies for fire fighting or other purposes. The Department, in its discretion, may grant exemptions. Owners may request exemptions from the ban on forms provided by the Department for extraordinary circumstances such as newly sodded lawns, etc.

# City of Eau Claire
# Ordinance on Private Water Supply Wells and Cross Connections

B. No rebate will be allowed to customers for such temporary suspension of supply. Nor will any claims be allowed against the utility or the city for damages caused by the interruption of water supply, variation of pressure, or turning off or on (either partially or entirely) the water supply to any premises due to the use of water for fire-fighting or other emergency, the breaking of pipes or the repairs or alterations to the water plant or system. (Ord. 4423 §7, 1984).

**14.08.100 Shutoff valves--Required--Maintenance.** Each service lateral shall be controlled by a corporation shutoff at the main and, if the service is smaller than 3 inches, a curb shutoff at or near the curb is also required. These valves are under the sole and absolute control of the utility and must not be operated by others without permission of the utility, except that a plumber may turn on the water for testing purposes, but only with consent in each case. (Ord. 4423 §8, 1984; Ord. 3395 §II, 1970; Ord. 3197 §I(part), 1970).

**14.08.105 Protective devices.** A. In general. The owner or occupant of every premise receiving water supply shall apply and maintain suitable means of protection of the premise supply, and all appliances thereof, against damage arising in any manner from the use of the water supply, variation of water pressure, or any interruption of water supply. Particularly, such owner or occupant must protect water cooled compressors for refrigeration systems by means of high pressure safety cutout devices. There shall likewise be provided means for the prevention of the transmission of water ram or noise of operation of any valve or appliance through the piping of their own or adjacent premises.

B. Relief valves. On all "closed systems" (i.e., systems having a check valve, pressure regulator, or reducing valve, water filter or softener), an effective pressure relief valve shall be installed either in the top-tapping or the upper side tapping of the hot water tank, or on the hot water distributing pipe connection at the tank. No stop valve shall be placed between the hot water tank and the relief valve or on the drain pipe.

C. Air chambers. All water supply systems, water distribution systems and components connected thereto, subject to water hammer, shall be provided with approved shock absorbing devices located and sized to suppress water hammer. All appliances, devices, equipment, fixtures and appurtenances with quick closing valves or which may create water hammer, shall be provided with shock absorbing devices. When copper air chambers are used, the minimum size shall be ½" x 1" x 14".

The size and location of the mechanical suppressors shall be in accord with the hydraulic design of the piping system served and to the manufacturer's recommendations. All mechanical water hammer suppressors shall be accessible. (Ord. 4423 §9, 1984).

**14.08.110 Stop and waste.** All service connections shall be provided with an approved stop and waste where it enters the building, for use in draining the systems. All services shall have a shutoff valve on both sides of meter. All water meters two inches or more in diameter shall be provided with a suitable valved and sealed bypass, having a diameter or no less than one inch smaller than the service entrance, which can be utilized in the event of removal, repair or changing of such meter. (Ord. 3395 §III, 1973; Ord. 3197 §I(part), 1970).

**14.08.115 Cross connections.** A. No person shall establish or permit to be established or maintain or permit to be maintained any cross connection. No interconnection shall be established whereby potable water from a private, auxiliary or emergency water supply other than the regular public water supply of the city of Eau Claire may enter the supply or distribution system of said municipality, unless such private, auxiliary or emergency water supply and the method of connection and use of such supply has been approved by the city of Eau Claire water utility and by the Wisconsin Department of Natural Resources in accordance with s. NR 111.25(3), Wisconsin Administrative Code.

B. The inspection services division of the city of Eau Claire shall cause inspections to be made of all properties served by the public water system where cross connections with the public water system are deemed possible. The frequency of inspections and reinspections, based on potential health hazards involved, shall be as established by the utilities division of the city of Eau Claire and as approved by the Wisconsin Department of Natural Resources.

C. Upon presentation of credentials, the representative of the inspection services division shall have the right to request entry at any reasonable time to examine any property served by a connection to the public water system of the city of Eau Claire for cross connections. If entry is refused, such representative shall seek to obtain a special inspection warrant under s. 66.0119, Wisconsin Statutes. On request, the owner, lessee, or occupant of any property so served shall furnish to the city any pertinent information regarding the piping system or systems on such property.

D. The city of Eau Claire water utility is hereby authorized and directed to discontinue water service to any property wherein any connection in violation of this section exists, and to take such other precautionary measures deemed necessary to eliminate any danger of contamination of the public water system. Water service shall be discontinued only after reasonable notice and opportunity for hearing under Chapter 68, Wisconsin Statutes, except as provided in subsection E. Water service to such property shall not be restored until the cross connection or connections have been eliminated in compliance with the provisions of this section.

E. If it is determined by the city of Eau Claire water utility that a cross connection or an emergency endangers public health, safety, or welfare and requires immediate action, and a written finding to that effect is filed with the clerk of the city of Eau Claire and delivered to the customer's premises, service may be immediately discontinued. The customer shall have an opportunity for hearing under Chapter 68, Wisconsin Statutes, within 10 days of such emergency discontinuances.

F. That the city of Eau Claire adopts by reference the State Plumbing Code of Wisconsin being Chapters ILHR 82, 83 and 84, Wisconsin Administrative Code.

G. This section does not supersede, but is supplementary to, the State Plumbing Code and the city of Eau Claire plumbing ordinances contained in Title 14. (Ord. 6212 §4, 2001; Ord. 4716 §2, 1987; Ord. 4423 §10, 1984).

**14.08.120 Street repairs.** A. When services are laid on an improved street or highway, in addition to the regular charge the premises served shall pay the cost of repairing said opening in the street at rates established by the city council, and on file with the plumbing inspector.

B. Trenches in streets shall be refilled with earth and mechanically tamped in 12-inch lifts until the street grade is reached, and to the satisfaction of the utility. (Ord. 5903 §1, 1998; Ord. 4423 §11, 1984; Ord. 3197 §I(part), 1970).

**14.08.130 Private fire protection.** Private fire protection service laterals to supply water to sprinkler systems or private fire hydrants will be permitted only upon application of the owner after detailed plans showing sizes and location of all pipes, valves, hydrants and sprinkler heads have been filed with and approved by the superintendent. Owners and insurance inspectors may test private fire hydrants and apparatus in the presence of the superintendent or an inspector assigned for such purposes. No charge shall be made for water used for private charges for these services. (Ord. 4423 §12, 1984; Ord. 3197 §I(part), 1970).

**14.08.140 Service outside corporate limits.** A. In order to provide adequate fire protection for persons and property within the corporate limits of the city of Eau Claire and to ensure the public health and safety of the residents, and for conserving the available water supply, it is necessary to limit unincorporated areas served to those previously served, specifically:

# Chippewa County
# Ordinance on Private Water Supply Wells

From Chippewa County, Wisconsin Ordinances, Chapter 62: Waste Treatment and Disposal and Sanitation, Article 2: Private Water Systems and Wells

Sec. 62-38. Requirements and permits.

(a) *Permits.*

(1) No person may install a private well or water system unless the owner of the property on which the private water supply system is to be installed holds a valid well location permit issued by the county or has made arrangements to acquire a permit by notifying the administrator prior to construction. Notification shall include providing the administrator with the property owner's name, address, property, legal description, proposed starting date and identification of the person who will be obtaining the permit. Unless other arrangements are made, the permit shall be applied for on the first workday following initial construction.

(2) No private water system may be located, installed or operated within the jurisdictional limits of the county without the appropriate permit being obtained in compliance with subsection (a)(1) of this section and without being in full compliance with the provisions of this article and all other applicable state and local laws and regulations. Permit applications for the location of a well shall be made by the property owner or the property owner's designated agent. Permits shall be issued from the office ofthe administrator.

(3) The permit application shall be on forms provided by the administrator.

(4) Well location permit applications shall be signed by the property owner or the property owner's designated agent. Well location permit applications shall be submitted to the administrator at least two working days prior to construction if the property owner or well constructor is interested in receiving information about potential contamination sources such as landfills; underground storage tanks; primary and replacement on-site sewage disposal system areas on the development site and on adjacent properties; and special casing areas. Where a well location permit application is submitted less than two working days prior to construction, the well constructor shall be responsible for maintaining full compliance with all provisions of Wis. Admin. Code NR ch. 812. The permit application may be submitted by the property owner or the property owner's designated agent but shall be issued to the property owner.

(5) The administrator or designated representative shall assist applicants in preparing applications and approve, disapprove or notify an applicant of the need to seek a variance or special approval from the department or return the permit application due to incompleteness for all private water systems to be constructed or modified in the county within two working days following submission of the permit application. The county may reserve final approval or disapproval of a permit which requires department action until the variance or special approval request has been acted on by the department.

(6) The administrator shall issue written notice to each applicant whose permit application is disapproved. An application shall be disapproved if the well construction would result in noncompliance with Wis. Admin. Code NR ch. 812 or if a well construction variance or special approval request was denied by the department. Each notice shall:

a. State the specific reason for denial.

b. Inform the applicant of the right to request a special approval or a variance from the department and the procedures for making such a request.

(7) When construction occurs on a weekend or holiday, notification shall be provided to the administrator on the first workday following the weekend or holiday in the same manner as described in subsection (a)(4) of this section. Unless other arrangements are made with the

administrator, the permit application shall be obtained on the first workday following the weekend or holiday. The well constructor shall be responsible for maintaining full compliance with all provisions of Wis. Admin. Code NR ch. 812.

(8) A permit transfer application shall be submitted to the county when there is a change of property owner after the application is submitted but before well construction is completed. Failure to submit a transfer application to the county shall invalidate a previously issued permit. The application shall be on a form made available by the administrator.

(9) As soon as the well location permit is received, it shall be displayed conspicuously at the well site during construction and for a minimum of seven days following completion of construction or until the well has been inspected by county staff, whichever occurs first. The county staff must be contacted within 24 hours of completion of a well.

(10) A well location permit shall be valid for a period of one year or until construction is completed, whichever occurs first. If the permit expires, a new application shall be submitted to the administrator. Reapplications shall be evaluated so that construction will comply with the provisions of Wis. Admin. Code NR ch. 812 in effect at the time of the reapplication. The administrator may require additional inspections and fees for reapplications.

(11) A well location permit is not required nor shall such be issued by the county for private water systems requiring written plan approval from the department.

# Wisconsin Administrative Code Ch. NR 811
# Requirements for the Operation and Design of Community Water Systems

Ch NR811.09(1) – Prohibition against cross connections

Ch. NR711.16(4)(d) – Separation of well from potential sources of contamination

# Chapter NR 811

## REQUIREMENTS FOR THE OPERATION AND DESIGN OF COMMUNITY WATER SYSTEMS



**Note:** Chapter NR 111 as it existed on April 30, 1992 was repealed and a new chapter NR 811 was created effective May 1, 1992.

**NR 811.01 Applicability.** This chapter governs the general operation, design and construction of community water systems and the construction of any water system serving 7 or more homes, 10 or more duplexes, 10 or more mobile homes, 10 or more condominiums units or 10 or more apartments. The standards for design and construction shall be considered minimum standards for new facilities and the minimum standards to which existing facilities shall be upgraded when improvements are undertaken at those facilities except for existing systems where all of the living units are owned by a single owner and the owner provides information indicating that less than 25 year–round residents will be served. These standards may be imposed on a case–by–case basis to existing facilities when the department determines that a potential health risk exists.

**Note:** The authority to promulgate and enforce these rules is contained in chs. 280 and 281, Stats. Pursuant to s. 299.97, Stats., any person who violates this chapter shall forfeit not less than $10 nor more than $5,000 for each violation. Each day of continued violation is a separate offense.

**History:** Cr. Register, April, 1992, No. 436, eff. 5–1–92; am., Register, December, 2000, No. 540, eff. 1–1–01.

**NR 811.02 Definitions.** In this chapter:

installed in easements and owned and maintained by the waterworks owner.

(b) Water mains to be connected to the distribution system at more than one point may be privately owned and maintained provided that a check valve is installed on the water main at each point of connection to the distribution system to prevent water from flowing back into the publicly owned distribution system. Each check valve shall be located in a manhole or vault and shall be immediately preceded and followed by a shut–off valve on the main. The water supplier shall have access to the manholes and valves for inspection purposes.

Note: Refer to s. Comm 82.40 for standards for the construction of private water mains.

**(2)** NORMAL PRESSURE. System pumps, the distribution system and related storage facilities shall be operated to maintain a minimum of 35 pounds per square inch at ground level at all locations in the distribution system under normal operating conditions including maximum day demand averaged over a 24 hour period. In areas where this pressure cannot be maintained, corrective action shall be taken to maintain a minimum of 35 pounds per square inch. If the corrective action requires a reservoir or booster pumps, the requirements of ss. NR 811.60 (1) and 811.72 to 811.77 shall be met.

**(3)** FIRE FLOW PRESSURE. The system shall be operated so that under fire flow conditions the residual pressure in the distribution system is not less than 20 pounds per square inch at ground level. Fire pumpers may not be connected to fire hydrants if 20 psi cannot be maintained during operation of the pumpers. In addition, the system owner shall notify the fire chief in writing of the location of all fire hydrants that cannot be used by fire pumpers and color code or tag the affected hydrants.

**(4)** LOSS OF PRESSURE. The supplier of water shall be responsible for taking corrective action when positive distribution system pressure is lost in an area affecting 25% or more of the distribution system. In addition to restoring system pressure, the supplier of water shall perform the following as necessary:

(a) Notify the appropriate district office of the department as soon as possible, but no later than one working day, as to the extent of the problem, cause and corrective actions taken.

(b) Start emergency disinfection of the water supply if the system is not already continuously disinfected. At a minimum, the free chlorine residual shall be 0.2 mg/l at the entry point to the distribution system and detectable throughout the distribution system or the total combined chlorine residual shall be 1.0 mg/l at the entry point and detectable throughout the distribution system. Higher disinfectant residuals may be required by the department if deemed necessary to assure a safe water supply. Water mains and storage facilities in the area that lost pressure shall be flushed to remove contaminated water and to quickly establish an adequate disinfectant residual. Emergency disinfection shall be maintained until approval is obtained from the department to cease.

(c) Collect distribution system water samples for bacteriological analyses from the pressure loss area as soon as adequate pressure is returned to the system. The number of samples collected shall increase as the extent of problem areas increases, but in no case may less than 2 samples be collected. The department shall be contacted to determine the number of samples and sampling locations. The supplier shall comply with s. NR 809.31 when system sampling indicates the presence of coliform organisms.

(d) Issue an immediate boil water notice to all affected water consumers unless it is determined by the department that an acute threat to public health does not exist. The boil water notice shall be maintained until approval is obtained from the department to cease.

(e) Notify the public in the area affected as prescribed in s. NR 809.951 unless the department determines that no health hazard has existed.

(f) Take all corrective actions necessary to prevent additional significant pressure losses.

**(5)** MAINTENANCE. Each supplier of water shall perform routine maintenance to ensure proper operation of the water system. A schedule shall be established for flushing dead–end mains or mains in other areas to remove sediment or water of poor quality. A number of hydrants and valves shall be exercised each year depending on system size so that all are routinely exercised. Record keeping shall be established to insure routine scheduling and performance of valve and hydrant exercising and maintenance. Water storage facilities shall be emptied and inspected at least once every 5 years and maintenance provided as necessary. Interior and exterior paint coatings for steel elevated water storage tanks or treatment structures shall be inspected by a person trained to evaluate the integrity of the paint system at least once every 5 years and repainted as necessary to maintain structural integrity. The supplier of water may perform the inspection if experienced in paint inspection. Upon completion of the water storage facility inspection, a report shall be submitted to the department documenting the condition of the storage facility.

Note: The department recommends that each valve and hydrant be operated at least once every 2 years.

History: Cr. Register, April, 1992, No. 436, eff. 5–1–92; corrections in (4) made under s. 13.93 (2m) (b) 7., Stats., Register, August, 1994, No. 464: am. (5), Register, December, 2000, No. 540, eff. 1–1–01; CR 00–162: am. (4) (e) Register November 2002 No. 563, eff. 12–1–02.

**NR 811.09 Cross–connections and interconnections.** Installation or replacement of cross–connections is prohibited. Plumbing back–siphonage, cross–connection and potability control regulations are provided in s. Comm 82.41; water system interconnections are prohibited except as provided in sub. (2). In addition the following requirements shall be met:

**(1)** CROSS–CONNECTION CONTROL PROGRAM. The supplier of water for every municipal water system shall develop and implement a comprehensive control program for the elimination of all existing cross–connections and prevention of all future cross–connections. A record of the cross–connection control program shall be kept current and available for annual review by the department. The control program shall include but not be limited to:

(a) A complete description of the program and the administration procedures, including designation of the inspection or enforcement agency or agencies;

(b) Local authority for implementation of the program, such as ordinance or rule;

(c) A time schedule for inspection and reinspection of consumer premises for cross–connections including appropriate record keeping. Unless otherwise authorized by the department, each supplier of water shall inspect every service a minimum of once every 10 years. It is recommended that industrial and commercial services be inspected once every 2 years.

(d) A description of the methods and devices which will be used to protect the water supply by reference to or inclusion of ch. Comm 82;

(e) Provisions for denial or discontinuance of water service, after reasonable notice, to any premises where an unprotected cross–connection exists.

(f) Submission to the department of a copy of an ordinance establishing a cross–connection control program.

**(2)** INTERCONNECTIONS WITH OTHER ACCEPTABLE WATER SOURCES. Interconnections between the public water supply system and another source of water are prohibited unless permitted by the department in individual cases. Approval of the department shall be obtained prior to the interconnection.

History: Cr. Register, April, 1992, No. 436, eff. 5–1–92; correction in (intro.) and (1) (d) made under s. 13.93 (2m) (b) 7., Stats., Register, December, 1998, No. 516.

**NR 811.10 Private well abandonment ordinance.** Suppliers of water for municipal water systems shall require the

not negate the owner's responsibility to assure proper construction and installation.

History: Cr. Register, April, 1992, No. 436, eff. 5-1-92.

## Subchapter III — Source Development – Groundwater

**NR 811.16 Wells. (1)** GENERAL REQUIREMENTS. (a) All wells shall be terminated above the ground surface. The pump discharge piping for permanent wells shall be exposed above the ground surface within a building or enclosure having a concrete floor.

(b) Permanent wells shall have watertight construction to such depth as may be required to exclude contamination. This shall be below the pumping water level except where exempted by the department on a case–by–case basis.

(c) Permanent wells shall be provided with a grout seal surrounding the protective casing. The grout seal shall be a minimum of 1.5 inches in thickness to the depths specified in ss. NR 811.22 and 811.23.

(d) All permanent wells shall have a minimum of 5 feet of grout in contact with the native geologic formation. Any outer casing shall be pulled back to meet this requirement, if necessary.

(e) All permanent wells shall be provided with a minimum of 60 feet of grouted protective casing wherever practicable.

(f) All wells shall be constructed using water from a source that will not contaminate the aquifer. A chlorine residual shall be maintained in the well during drilling operations.

(g) Test wells shall be drilled for permanent wells proposed in unconsolidated formations to determine geologic formations and water quality and quantity data. Test wells to be converted to permanent wells or test wells to be pumped at a rate of 70 gallons per minute or more for a period of more than 72 hours shall be approved by the department prior to their construction.

Note: In certain areas where geologic data for consolidated formations or water quality data is not available, test wells may be required by the department.

(h) Flowing wells shall be provided with valving to control the flow and the valve shall be throttled as much as practicable to prevent the erosion of the confining bed; every practicable effort shall be made to install the grouted casing below the confining bed.

(i) Materials used as drilling aids, such as drilling muds and foam or other aids shall be compounds approved by the department.

**(2)** WELL DRILLER REQUIREMENTS. All new wells shall be constructed and existing wells reconstructed by a driller licensed in Wisconsin. A Wisconsin well constructor's report shall be forwarded to the department with a copy to the owner by the driller immediately upon completion of a new well. A revised Wisconsin well constructor's report shall be forwarded to the department with a copy to the owner immediately upon completion of a reconstructed well.

Note: Chapter NR 146 contains the registration requirements for well drillers.

**(3)** INTERFERENCE BETWEEN UTILITY WELLS. When the department determines that a proposed well may have a substantial effect on the water levels in one or more wells owned by another water utility, the following procedure shall be followed:

(a) The department shall provide the owners of utility wells which may be affected by the proposed well with information on its location, proposed constructional features and the anticipated volume of water to be withdrawn.

(b) If the owner of another utility well wishes to object to the proposed utility well, the owner shall inform the department in writing of the reasons for objection within 30 days of receipt of the information in par. (a).

(c) If notice of objection is filed and good cause is shown, the department may hold a public hearing at which all interested parties may present testimony to be used by the department in determining if a restriction shall be placed on the volume of water withdrawn from the proposed well or existing utility wells.

**(4)** WELL SITES. The suitability of a site for a well is dependent on geological and topographic conditions and possible sources of contamination. However, the following general requirements shall be met:

(a) For wells to serve municipalities and subdivisions, a lot or parcel of land shall be reserved for the construction of the well which has minimum dimensions of 100 feet by 100 feet. The well shall be located near the center of the lot or parcel. For other wells, the well shall be located a minimum of 50 feet from any property boundary. These dimensions may be modified by the department on a case–by–case basis where they are unnecessary or inadequate to protect water quality.

(b) Wells may be constructed or replaced on sites in the floodplain outside of the floodway provided that the pumphouse floor is 2 feet or more above the regional flood elevation and there is dry land access to the pumphouse. No new well may be constructed or existing well reconstructed on a site in a floodway. Wells shall be located in an area accessible during the entire year. Where necessary, road improvements shall be installed to provide year round access. Wells shall be located on property owned by the water utility owner. Access roads shall be on property owned by the supplier of water or for which easements have been obtained.

Note: Refer to ch. NR 116 for floodplain and floodway criteria.

(c) A well site investigation report as required by s. NR 811.13 (1) (b) shall be prepared by the owner or the owner's representative for each well site and submitted to the department prior to or concurrent with the request for approval of a test well or a permanent well. The report shall be submitted on forms or in a format provided by the department.

(d) The well shall be adequately separated from potential sources of contamination. Unless a hydrogeologic investigation indicates lesser separation distances would provide adequate protection of a well from contamination, the minimum separation distances provided shall be:

1. Fifty feet between a well and a storm sewer main.

2. Two hundred feet between a well and any sanitary sewer main, sanitary sewer manhole, lift station or single family residential fuel oil tank. A lesser separation distance may be allowed for sanitary sewer mains where the sanitary sewer main is constructed of water main materials and joints and pressure tested in place to meet current AWWA C600 specifications. In no case may the separation distance between a well and a sanitary sewer main be less than 50 feet.

3. Four hundred feet between a well and a septic tank or soil adsorption unit receiving less than 8,000 gallons per day, a cemetery or a storm water drainage pond.

4. Six hundred feet between a well and any gasoline or fuel oil storage tank installation that has received written approval from the department of commerce or its designated agent under s. Comm 10.10.

5. One thousand feet between a well and land application of municipal, commercial or industrial waste; the boundaries of a landspreading facility for spreading of petroleum–contaminated soil regulated under ch. NR 718 while that facility is in operation; industrial, commercial or municipal waste water lagoons or storage structures; manure stacks or storage structures; and septic tanks or soil adsorption units receiving 8,000 gallons per day or more.

6. Twelve hundred feet between a well and any solid waste storage, transportation, transfer, incineration, air curtain destructor, processing, wood burning, one time disposal or small demolition facility; sanitary landfill; any property with residual groundwater contamination that exceeds ch. NR 140 enforcement standards that is shown on the department's geographic information system registry of closed remediation sites; coal storage area; salt or deicing material storage area; gasoline or fuel oil storage